

Model MILITARY INTERNATIONAL

**KIWI
FIREFLY**

Euro Millitaire award
winning Dragon
Sherman VC Firefly

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THE PERFECT STURM?

Pete Usher builds and reviews AFV Club's
formidable looking Sturmtiger

INSIDE
STEP BY STEP
WEATHERING
GUIDE

DANUBE DEFENDER

Dennis Brändle goes to town detailing
Dragon's Panther Ausf.G Smart Kit

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David Doyle offers us some interesting information on the few war time photos that exist of the ultra-rare Sturmtiger

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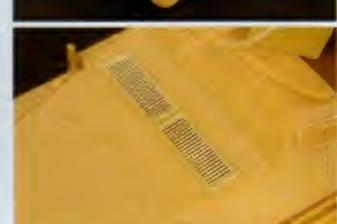
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TASCA NEWS

Following the success of Tasca's Firefly and M4A1 kits, we are now going to be treated to two more, both I'm sure will be gratefully received by fans of this legendary tank.

Thanks to Tasca's superb tooling and fine detailing these will make perfect additions to anyone's collection.

Look for more information as and when we get the kits for review.

35-011 British Sherman VC FIREFLY w/Cast Cheek-armour Turret (late March)

35-012 U.S. Medium Tank M4A1 Sherman (Late Production) (late April)

ABER IN THE UK

Creative Models have just announced that they will be distributing Aber products along side long time importer and distributor Historex Agents. Creative Models will be focused on trade distribution rather than retail mail order, which Historex have been synonymous with.

The upside of this approach is that we should see more Aber products appearing in local model shop.



PRIME MOVER

Trumpeter have just announced their all new Sd.Kfz.7, 8 ton halftrack (early production). This vehicle is most typically associated with towing the dreaded 88mm FlaK gun and the 15cm sFH18 field howitzer. The kit will come with individual track links, full engine, gearbox and winch, as well as photo-etched parts making this one a very popular subject to take over the reigns of Tamiya's ageing version.



BULGARIAN BUNKERS

Paul Middleton from MAFVA has passed on these incredible photos of various World War II German tanks and assault guns which had been used as bunkers by the Bulgarian Army. They have been recently unearthed and recovered.

In total some 70+ T34's were dug out along with around a dozen Panzer IV's, a couple of StuG III's and a Jagdpanzer IV L48.

Thanks again to Paul for passing on these great photos. For the full story check out - http://www.com-central.net/index.php?name=Forums&file=vie_wtopic&printertopic=1&t=8865&postdays=0&postorder=asc&start=0

THE LATEST HAUL

Hauler have been as busy as ever keeping pace with the latest 1:48 scale armour releases.

To compliment the Hobby Boss' KV-1 and 2, Hauler have produced two very nice generic detail sets. And to compliment Tamiya's recent quarter scale Sd.Kfz 250/3 we have no fewer than three sets, one for the exterior, one very comprehensive set to detail the interior, including instrument panel and radio and lastly a set of engine ventilation grilles.

HLX48234 Pz.Kpfw.754(r) KV-2 'Hobby Boss'

HLX48235 Pz.Kpfw.756(r) KV-1 'Hobby Boss'

HLX48236 Sd.Kfz.250/3 INTERIOR

HLX48237 Sd.Kfz.250/3 EXTERIOR

HLX48238 Sd.Kfz.250 grilles

Hauler are available direct from www.hauler.cz and in the UK from Lou Stener at www.armour-models.co.uk



Ian McGonagle looks at the latest incarnation of the legendary M113 armoured personnel carrier.

SOLDIERING ON

The M113 has a long and distinguished service record with Armed Forces throughout the world and because of this the need to update and adapt has become apparent. The new kid on the block is the A3, a faster, up-armoured version with a lot more emphasis on crew safety. As the M1s streaked across the desert during the first gulf war the infantry strived to keep up in the slow A2s, so the need for speed was identified. Also the need to remove the fuel cells from the cabin became not only popular with the crew but free up space within the vehicle, 16 cubic feet to be precise. The A3 has all of these, with its 275 horse powered Detroit Diesel coupled to a new transmission, the RISE PACK gives speed, powerful braking and for the green's, fuel economy.

The cabin, now free of fuel, has the added protection of Spall Suppression armour reducing impacts from hostile fire.

Academy have revisited their M113 kits and given the modeller an updated kit instead of a new one. Coming in the now familiar format, the box displays the A3 in Iraq patrolling through a city street. Open the box and you are confronted by sand coloured

sprues neatly bagged, individual tracks as well as rubber band tracks, a small decal sheet and an A4 fold out instruction sheet. The sprues show little sign of flash and in fact display reasonable amount of detail, sprues A and B are the latest additions bringing this aged kit to the A3 specification.

Starting from the inside out, as you will see from the box art you can model the interior in all its glory, but a few errors are evident if you follow this path. The engine supplied is the old nineties style and not the up to date Diesel, also the driver has the standard tank steering levers and not the 'W' style wheel as used on the A3 (supposedly to aid driver training). Having given the bad, here are the good parts, a great deal of the build is on the interior and when its done the effect will be rewarding, the engine bay can be shown in all its glory but reference material will be needed.

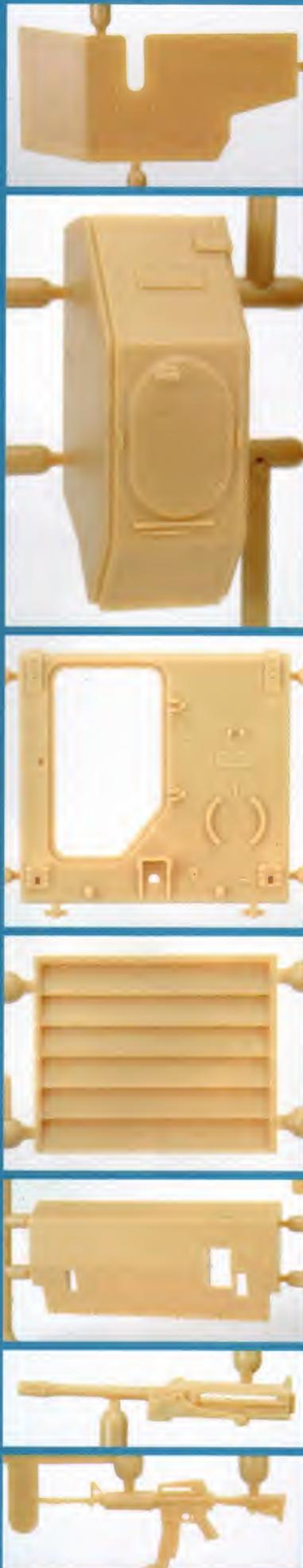
The exterior detail has a chunky appearance with such things as the cages and guards protecting the delicate items on the hull. The moulding of the tool set as one item is not to my taste and a further fault is the depiction of the cleats as plastic lines, all of these will need differing levels of attention to correct. Again

the good parts of the kit help to, not cast too long a shadow over it. The individual tracks show good definition and are a marked improvement over the rubber bands, but they do suffer from a sink mark on each of the track pads. The model does come with a generous amount of stowage and kit that can be added as required, you also get two crew figures although no body armour is moulded on to them. The weapons station is well represented with both the .50cal and 30mm Mk 19 grenade launcher being provided. A clear set of plastic bottles are included within the kit to help set the theme.

To summarise, Academy have long given the modeller a base to work from and should be applauded for that but small items do let them down. I am sure that the upper hull will come together to represent the trooper's rugged exterior although adjustments may be made to sharpen the detail. The interior is a large part of this model and is well represented so should be shown, but it does not show the crispness of an AFV Club or Dragon kit, it is however a welcome addition to any collection. ■



The individual link tracks are a vast improvement over the normal 'rubber band' style tracks supplied with most models of the M113, however these do suffer from an annoying sink mark in the centre of each track pad. Not the end of the world, just time consuming to fill and sand.



KIWI FIREFLY ON A WING AND A PRAYER

Les Smith describes the build of his Euro Militaire award winning Dragon 'Firefly'.



Sherman VC Firefly
4th New Zealand
May 1945



The Sherman Firefly VC entered service with the New Zealand 4th Armoured Brigade in late 1944 during their campaign in Italy, replacing the IC firefly currently used at the time. March 1945, after the brigade was withdrawn to Cesenatico for rest, 12 VC fireflies were received, followed by a further 12 after the Brigade's crossing of the Senio River in April, bringing total brigade numbers to 36. The 18th and 19th Armoured Regiments were equipped with one VC per troop, totalling 12 for each regiment. 20th Armoured Regiment formed a full troop of four VC's in their Regimental HQ, with 3 VC's in two squadrons and 2 VC's in the third squadron. All tactical insignia was based on the British system, and early camouflage for all vehicles prior to moving to Italy was a two tone pattern with base coat of mud-grey topped with a blue-black disruptive pattern. June 1944, an order for all vehicles and tanks to be repainted was issued, and over time were repainted olive drab, however it was not uncommon to see vehicles as late as Christmas 1944 sporting the older two tone scheme. By the time of the Senio River crossing in 1945 all tanks had been painted olive drab. At the same period, orders were issued for counter shading of the 17-pounder gun tanks, white on the lower portion of the barrel and black or olive drab on the top in a wavy pattern with a white ring were the counter shading started. This measure was to hide the true length of the barrel and therefore the importance and potency of this tank.

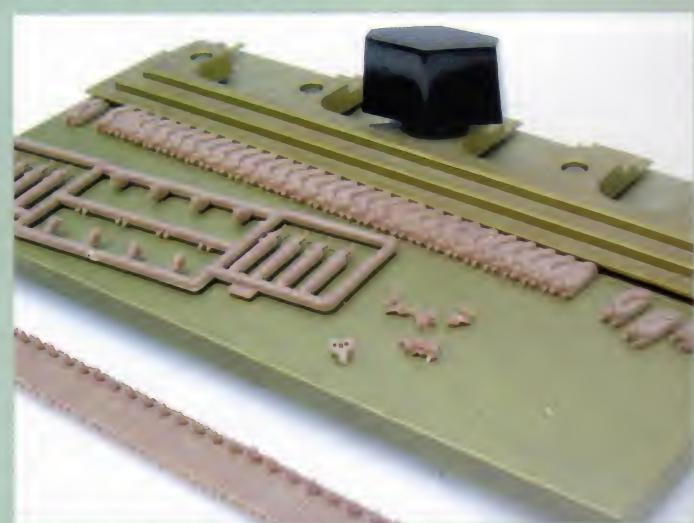
THE INGREDIENTS

The Model for this build was Dragon's 3rd release of the VC and although not totally correct, (depending on who you speak to)

was in my opinion an excellent kit. At the time Tasca's Firefly was but a twinkle in their eye. While on a stopover for three days in Hong Kong, heading home from the UK, I visited a superb model shop not 50 metres from my hotel, where I found not only Formations' resin turret upgrade but a whole host of other items to cram into my already bulging suitcase! After my return home to New Zealand, I started to assess the possibilities with the kit, and following some research, decided there were indeed some areas that could benefit from improvement. With that and some tapping on the keyboard, I'd ordered through the Formations website more items and these included idler wheels, as the kit items were hollow on the reverse, also some stowage boxes and their lovely resin vehicle tools. Whilst in the spending mood I also ordered some turned aluminium barrels from Historex Agents. The last major upgrade was to be a set of Model Kasten (MK) T48 tracks, with duck-bills (I still get shivers thinking about assembling these insanely intricate tracks) Together I had the makings for my Regimental HQ Firefly.

GETTING STARTED

Construction started in earnest with the lower hull, adding three piece transmission housing, lower rear plate, idler mounts and rear access door, followed by the suspension arms and road wheels. It's at this stage that I sometimes add putty to the lower hull sides and rear, to represent the build up of dry mud seen on many vehicles. My choice for this is plastic wood putty used in the joinery business, it has a coarse mud like finish in 1:35 scale and dries quickly, it's only downside, the fumes are somewhat overpowering, good ventilation is a must. I left



A Mission Models Etch Mate was used as a make shift jig to hold the Model Kasten links in place while the end connectors were attached.



The Model Kasten tracks are made up of some nine parts per link including the extended end connectors and were very time consuming to assemble, but look superb when fitted.

◀ the drive sprockets and idlers until later. Continuing with the upper hull construction, I added extra detail where needed, this included removing the moulded strip for attaching sand shields and replacing with Evergreen strip along with new weld beads from stretched sprue. These strips were completed by drilling out the bolt holes which had to be evenly spaced along its length. Weld beads were added or enhanced on the armour plate

joins using Tamiya putty, adding texture with the blade of a hobby knife. Moving along, adding the resin stowage bins, tools and fire extinguishers rounded off the bulk of the hull detailing. To the front of the tank I added brackets to hold a timber plank used to bridge the fenders. This was common on many Shermans and Kiwi tanks were no

exception, this held all the extra stowage and impromptu extra armour added by the crews. A small detail on the spare road wheels was to add a bearing bush to enhance, and eliminate an overly large centre hole. The timber plank, made from balsa stock would be left until final painting to preserve its natural look. Further work continued with

“One problem with the tracks, you only had to sneeze and the duckbills would come off”

the addition of the Formations resin headlights and etched brass, their origin I’m unsure of. Hull hatches were installed after replacing the moulded hatch springs with fine springs made by coiling fuse wire over a very thin drill bit, being fiddly to attach but better in detail. Final details were added to the hull as per the instruction sheet.

The Formations resin gun barrel was replaced with a turned aluminium piece as the author was afraid a resin barrel might warp over time.



Just visible in this shot is the plastic wood putty used to simulate the build up of mud around the lower hull and idler wheel mounts.



In this photo it is evident just how many Formations resin detailing sets have been used to replace the original parts in the Dragon kit. For a complete list, check out the ModelSpec panel.

TURRET

Not a large amount of work was needed to construct Formations' exquisite casting, but none the less it was great to work on. Adding cheek appliqué armour with weld seams was easy enough as was the loaders and commander's hatch, which would be left open for the inclusion of a figure.

but because this was arguably the exception to the rule, I chose to add the box! To complete the turret I added the mantlet and the turned aluminium barrel, which took a little packing on the inside to strengthen the joint. It should be noted, that the resin barrel which came with the turret is excellent, but I had visions of it warping (as the Editor's Formations Firefly barrel did back in issue 1) so chose the soft option. Resin knapsacks from the spares box

were glued onto the side of the turret with the addition of lead foil straps hung from new wire eyelets. The last item to add was the aerial with photo-etch guard. During construction of the tank itself, I had toiled away on the intricate Model Kasten tracks. Helpful was the use of my etchmate for assembling the tracks,



The author was very impressed with the quality of the Formations turret. The only additions being some weld seams around the applique cheek armour, lifting eyes and some of the smaller fixtures and fittings.



One of the distinguishing features of the hulls used for Firefly tanks is the block of armour welded over the redundant hull machine gun opening.

short lengths at a time, and while the glue was soft, attachment to the vehicle was carried out as was the drive sprockets and resin idlers. One problem with the tracks, you only had to sneeze and the duckbills would come off, requiring re-gluing all connections for added strength. Finally finished, the tracks did look nice. Was it worth it? (Please note these MK tracks consist of nine parts per link including the duckbills! Ed.) Well the jury is still out on that, as I've another set in the cupboard!

ADDING O/D

Painting the model started with Tamiya's aerosol grey primer, this providing a great key for subsequent painting, and with all the multi-media on this kit, I think it was a must. My choice for the base coat was Humbrol enamel No. 66 Olive Drab, and to get a faded look, I mixed in shades of lighter green, at an unrecorded ratio, or chart number. Once my base coat had dried, I misted some Humbrol Desert Yellow No.93, well diluted, through the air-brush on the large panels and areas where direct light would fall. This colour broke up the plain scheme well, and after drying I commenced with the vehicle markings. Tactical insignia added to the turret in the form of blue triangles, used for the RHQ and HQ squadrons, these were from

'British Squadron Marks and troop numbers' by Archer Fine Transfers, (AR35086B). Vehicle identification numbers were applied using Eduard masks and sprayed with a lightened Tamiya XF-8 Flat Blue. The War Department registration number for this tank was a subject of conjecture, my source being unsure of the last three digits of tank number 7 from RHQ, 20 Regiment, so a guess on the final three digits was necessary. Divisional insignia and unit serial patch were hand painted on the right hand side of the transmission housing, also on the centre rear hull stowage bin, being a white fern on a black square atop a red rectangle, carrying the number (52) in white. Final markings being the aerial recognition star within a circle carried on the engine deck, also an Archer transfer sheet No.AR35048. At this stage I set about painting the tools and stowage, as these were painted in situ with the rest of my tank I used the simple technique of painting these items using oils in thin washes, built up until the depth of colour was attained. This way I find it easier to get paint into hard to reach areas and once weathering has begun, any spills are easily



The entire model including stowage, wheels and tracks have now been undercoated with Tamiya's aerosol grey primer prior to applying the Humbrol camouflage colours.

WEATHERING

Weathering with washes of Winsor & Newton oils in various earthy tones blended this area nicely and when the pigments and pastels come out they would receive their final touches. The last paint work carried out prior to final weathering was the counter shaded gun barrel. This was masked and sprayed with Humbrol Matt White enamel No.34. Once dry, I cut a mask with a wavy pattern using Tamiya yellow tape, applied to the barrel and sprayed with thinned ▶

The Commander is from the Ultra Cast range, which are imported into the UK by Accurate Armour.





Note how the turret exhibits a cleaner more polished look than the hull sides, this is due to the constant movement by the crew as the clamber onto and slide off of the turret, which in time buffs the surface of the paint.



Here we can see how 'pin washes' have been used to pick out the netting detail on the helmet and on the bearing in the centre of the spare wheel.

◀ black enamel. While still soft I carefully peeled off the mask and using a hobby knife scratched the paint to simulate wear. With the final weathering stage, I have no prescribed method or procedure so I can't detail it as a sequence, rather I can detail what I tried to achieve. Firstly I used several light washes, mainly using Vandyke Brown from the Winsor & Newton range adding black for a sepia tone, around the deepest details, such as nuts, bolts and the like. On the larger areas I like to use a Transparent Gold Ochre wash, again from the Winsor & Newton range of oils, this colour works well with greens, giving a nice depth to the colour. After this oil wash was totally dry, with a soft cloth I polished the areas of the vehicle where the crew would clamber or rub the surface of the tank, this is the reason that I have returned to using enamels as a base colour,

as they polish nicely giving a very realistic sheen mimicking that which is seen on real vehicles, satin or other varnishes look exactly as they are, just painted on. Weathering continues over the whole vehicle picking out detail with pin washes using browns and blacks, such as stowage and also on the tools. I continue sometimes repeatedly over some of the areas, trying different colour washes to change the contrast between two similar items or areas, this adds interest to an otherwise monotone scheme. Once happy with this stage of weathering I would move onto the chalk pastel and pigment phase. Using artist pastels ground up, and pigments straight from the jar I attempt to capture the look of a moderately dusty vehicle in the Italian theatre. Using predominately European pigment P028 from the Mig range, but adding pastels to change the



Apart from the Divisional insignia and the unit patches, all other markings used came from the Archer dry transfer range stocked by Historex-Agents in the UK.



The ultra-realistic sheen was achieved by polishing the enamel base colour once the oil paint washes had dried fully. Note also the different tones of dirt and grim around the loader's hatch.

hue slightly in different locations to simulate dust which has soaked into fuel or oil spills. This was especially true of the areas around the fuel caps and also the engine deck plates.

RE-POLISHING AND SCRATCHES

Once I had finished applying the dust effects I re-polished with a soft cloth the areas I had polished originally. Finally happy with the weathering I moved onto some very light chipping and scratches around the turret hatches and also areas that naturally get knocked around during the course of use. Then with a graphite pencil, I highlighted sharp edges and well worn areas, including the tracks, especially the outer edges of the duckbills which readily got knocked around, even shedding, which I have tried to simulate. The shovel, picks and crow bars received the graphite treatment to finish. After



“Weld beads were added or enhanced on the armour plate joins using Tamiya putty, adding texture with the blade of a hobby knife.”

mounting the model on its display base, I went over it again giving it a touch up here and there. Finally, I used Tamiya acrylic Clear X-22 with XF-10 Flat Brown and using a very fine brush added this paint to working areas, the track, running gear and lower hull amongst the dusted areas to impart a look of oil and grease leaching to the surface.

THE COMMANDER

Figure painting, not one of my strong points at this stage, but I strive to improve as I complete each piece. The figure chosen for my Firefly was from the Commonwealth Tank Crew by Ultra Cast. These figures are exceptionally good, the heads being some of the best. To paint the figure, firstly I primed with Humbrol Matt No.250 Sand, this was primarily for the flesh areas, but also created a nice base for the khaki British pattern uniform. Painting the face was of course

done first, using oils. I'll not detail the painting of the face, as there are a multitude of good references on this subject. Fortunately I thought that my figures face had a good Kiwi likeness, rugged and with a slight smug look of confidence. The beret, painted in black oils and topped with a dab of brass colour for the badge, copied the British pattern RTR beret nicely, authorised for use in 1942. The torso was painted using olive drab oil paint over the base coat and while still damp, transparent gold ochre was worked into it to create a reasonable likeness of the khaki battledress colour, shading was done with neat olive drab and highlights with lightened olive drab. The hands were finished in flesh tones with a cigarette placed in one hand and microphone in the other. To finish, headphone wires were attached and the figure glued inside the commander's hatch. ■

CONCLUSION

I thoroughly enjoyed this project, being the first Sherman I've built in around 20 years! From the superb Formations sets, to the Model Kasten tracks, although superbly detailed did cause much anguish and slowed the build down considerable. Finally, you may wonder the reason behind the sub title for this article "On a wing and a prayer", well this was solely for the reason that this model was packed up and sent by DHL air courier 12 thousand miles to England where my friend Phil Stutcinskas had agreed to not only enter this model on my behalf at Euro Militaire 07, but also take the photos for this article, for which I thank him immensely, and with a prayer, it did arrive safely at his door. Thanks Phil. Also I'd like to thank Brian Murdoch for collecting the Sherman from the show. ■

Modelspec

DRAGON 1:35 SHERMAN VC FIREFLY Kit No. 6182

Items used

Formations - F022 Low bustle Firefly turret, F020 Pressed idler wheels, F018 Sherman pioneer tools, F048 British Sherman hull and turret stowage boxes, F050 Sherman headlight set, F060 Tow clevis assortment.
Model Kasten - SK48 rubber chevron tracks with duckbill.
Eduard - Turned aluminium Firefly barrel ED34010
Archer Fine Transfers - Various. See text for codes.

Paints used

Humbrol enamels & Tamiya acrylics. See text for no's.
Oil paints, Winsor & Newton
Mig pigments, P028 Europe Dust, P033 Dark Mud
Faber-Castell chalk pastels

References

'4th New Zealand Armoured Brigade in Italy' by Jeffrey Plowman and Malcolm Thomas.
'Sherman in Action' Squadron/signal publications
TANXheaven website www.tanxheaven.com

- Accurate fit of parts and excellent detail with no problems encountered during build.
- Inaccurate recessed weld seams around hull top.

Available from

Dragon available from all good model shops worldwide.
Formations available in the UK from Friendship Models. www.friendshipmodels.com

Rating

Base kit 7.5/10 Formations accessories 9/10





GETTING DIRTY

Mark Neville gives us an insight to his stunning Panzer III and offers a general step by step guide to the weathering techniques he uses.

No matter what your preference is regarding building models, simply straight from the box or etch brass encrusted masterpieces, the painting of the piece will be the make or break of your satisfaction with your model building. Of course I'm speaking from my own personal opinion here. Some modeller's work is so involved and complex from a building perspective it almost seems a shame to cover the work with colour which can almost distract from the intricate detail. Your model, your choice.

The majority of us though will want our military subjects to look

'used'. This will vary from project to project- a Sherman DD stuck on the beach at Normandy would have a much fresher appearance than a T34 in combat on the streets of Berlin, a mixture of historical sense and artistic licence will give us an idea of how we want a model to look.

Modern vehicles may well be covered with dirt on exercise but would not be as battered to the extent of a wartime vehicle but the shading and highlighting that gives the model some depth and scale would still apply.

Everyone will develop and evolve their own style and ideas, using

certain materials to achieve certain effects. I'll try to demonstrate here some ideas that some of you may have used before, and some not. This is a brief description of how I enjoy painting, this may not be to others tastes but that's the beauty of the artistic side of military modelling, the various styles of finishing in our hobby keep things interesting- it's all down to personal taste and how you want your models to look. The sheer amount of products available now can be overwhelming, especially if you're new to the hobby or lack confidence and don't want to ruin a perfectly good model. Every

method and technique now seems to have its own 'name' which is commonly used- I'll try to relate to these where I can. These methods apply to all scales, although some can be tricky in 1:72 or 1:144 !

German grey (dunkelgrau) is renowned as one of the most difficult colours to make interesting on a model and bring it to life. I'll take you through some of the techniques I used on my Panzer IIIG which can help make these single colour paint schemes a little more realistic. This is one of the older generation Dragon kits but builds into a pretty accurate and nicely detailed version of this Wehrmacht

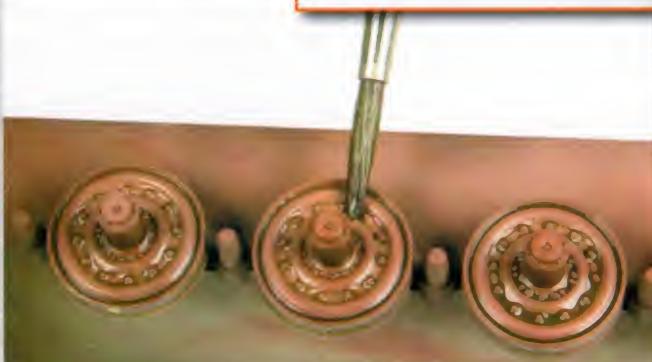


After the base camouflage colour has been applied, diluted black ink can be airbrushed along all edges and around all detail to start the weathering process.

A worthwhile investment would be a set of good quality flat sable artist's paint brushes.



Good quality oil paints are mixed to the desired colour and can be thinned with white spirit, pure turpentine or enamel thinners to produce the wash.



Pre-mixed filters such as these from Mig Productions can not only be used to add various tones to a model's finish but can also be used to add dust and dirt effects as on these tracks.



Pin washes can be used to add further emphasis to particular detail, such as this spare wheel hub cap. Companies such as Mig Productions now produce pre-mixed washes in various colours perfect for this task.



workhorse. The additions I've made are the mudguards from brass shim with etched brass tread-plate by Elefant, a 5cm barrel also from Elefant, TMD resin cupola and various etched brass brackets and fittings from the spares box. I used the superior Tamiya tools etc., and scratch-built the rear plate and starter port cover to correct the shape also adding some detail to the fixings.

BASE COAT

We've all done this, and everyone has products they feel comfortable with, mostly enamels or acrylics.

My preference at the moment is Vallejo acrylic thinned with water and airbrushed. I usually prime my models with an automotive acrylic primer from an aerosol, the Vallejo paint seems to adhere well to this. If you don't have an airbrush I've found these paints to brush well with a good quality flat sable paintbrush. I've found most commercial colours will need lightening to some degree to give the right 'scale' appearance, the smaller the scale, the lighter the colour. Here I've used Vallejo Black/Grey lightened with white and a tiny amount of blue. War-time colour photos show panzer grey as a very dark

colour which eventually lightens due to dust and fading, I try to get a colour dark enough to be close, but light enough to show details.

SHADING

Not weathering as such- the start of adding dimension and adding more contrasts than natural light will give in this scale.

I generally use heavily diluted black ink through the airbrush for this, it's very thin allowing gradual build up in the areas of shadow. I concentrate on areas which would naturally be in shadow and also the edges of panels, almost adding 'frames'. The model starts to take

on more of a dimensional look, less flat and uniform. This can be done before the base coat (pre-shading) and is good if you're trying this for the first time as you have to go very heavy with the shading and then allow it to just show through the base colour you apply.

DUST BUILD UP

This technique works on dark grey and dark green vehicles. If you study some photos of real vehicles in action you notice an un-uniform 'mottle' to the paint surface formed by layers of dust and dirt built-up then brushed off and so on. Obviously this will vary depending



When dry-brushing, it is essential that the majority of the paint is removed from the brush onto some kitchen towel before committing paint to the model.



Getting the best results takes a little practice. Gently flicking the brush over the part from all angles and directions gives the best results.



As described in the text, commercially available pigments, ground pastel chalks, or even real dirt can be used to add dust and mud effects.



Here we can see a combination of pigment washes around the wheel rims and pin washes around the centre caps to create the effect of lubricating grease and oil seeping from the hubs.



On this OIF M113, Mig Productions Pigments are being 'washed' on with the aid of some enamel thinners. Once dry the excess can be removed with a short haired brush.



Oil paint thinned with white spirit and mixed with gloss enamel varnish can be used to replicate fuel spills. The thinners help the paint flow as the real fuel would and the gloss adds a realistic translucent sheen.

► on where the vehicle is operating, desert and dry conditions will produce more dust.

To achieve this random, patchy look I first take some liquid masking fluid and a 'Scotch-Brite' type sanding pad (sponge also works) dab the pad in the masking fluid and gently touch it on areas where dust would be removed by crew movement, loading etc. You're looking to leave small random areas of masking fluid that will reveal your base colour later.

Another medium now, gouache paint. The reason to use gouache with this technique is that it will not disturb previous paint and can be

washed off with water until you're happy with the results. A very matt finish is needed for the gouache to adhere. I use the Winsor & Newton brand, using only white, black, yellow and a red-brown you should be able to mix any 'dirt' colours you may need. Working with water, thin the gouache to a milk-like consistency with a large round brush and transfer this into the cup of your airbrush, you will need to use an airbrush as we're looking to gradually build up the colour here. You'll need to practice spraying gouache the consistency of the paint and air pressure will vary between different airbrushes. Don't worry

too much if the paint 'beads' on the surface as next I take a damp brush and work the gouache around to achieve a mottling. Once dry the masking fluid can be removed, you may find the patches of base colour remaining are too much of a contrast, use a damp brush again to blend the colours until you're happy with the effect, spray more of the dust colour across the running gear and other areas. The surfaces now have some nice variety to the finish and any uniformity of the base colour is broken up.

WASHES AND FILTERS

The next step I take is to add

further depth and interest to the colours. A colour 'filter' as they have become known is no more than applying very dilute colour to certain panels and textures. The beauty of the water-based gouache used in the previous step is that you can work over it immediately with enamel based thinners.

For example, giving cast steel parts a slightly different tone will help to emphasise the different texture in comparison to rolled steel plate and further adds to the scale appearance of the paintwork. I use a tiny amount of oil colour with enamel thinner and a large



To add fine scratches and scrapes, it is best to use a fine pointed brush. The secret to this technique is to thin the paint just enough for it to flow from the brush without it flooding the surface and spoiling the finish.



When adding scratches and scrapes try and keep in mind the 'why' and 'where' this type of wear would be created, such as around hatches and along the sides of the hull where the tank has brushed past undergrowth, rubble or barbed wire for instance.



To add a more random paint damage effect, dark green, grey or brown acrylic paint can be applied with a small piece of sponge or scouring pad by gently dabbing along edges and around areas which would naturally suffer from the most abuse.



A sponge or small piece of Scotch Brite is perfect for adding the random chipping and scratched effect. As with the dry-brushing it is important to remove the excess paint on some paper before working on the model itself.

brush. I find vibrant colours work best for this- cobalt blue and yellow ochre work well on green vehicles. Work on one panel or section at a time, not too 'wet' with the brush, just enough to let the mix flow. Use lighter, brighter colours on the top surfaces where the light catches further enhancing the 3D depth. Good quality oil paint is important here as the pigment is fine and dissolves well in the thinner. Enamels also work but do not have the vibrancy of colour of oil paints. Commercially available filters will do the same job here, although I'm yet to try them, they have been well received by

modellers.

Sometimes looking at good box-art of your model can give an idea of where to add light and shade, as the artist has done in two dimensions you can help add depth to the model in three dimensions.

PIN WASHES

I use a hairdryer set on cool (or air blown from the airbrush) to help speed up the drying of the filters, Next, local controlled washes (sometimes called 'pin-washes') will help to bring out smaller details like bolt heads and weld seams. These vary in colour depending on your base coat, usu-

ally dark browns and black, again using heavily thinned oil paint but using a smaller brush (No.1 or 2 size). Load the brush and touch the point on the item you wish to shade around, the thinned paint will flow around the shape or lie in the recesses creating shadow. In some cases an overall wash of a dark shade may work better and be quicker, for example the running gear of a vehicle- I use a large brush for this and keep it wet to allow the tinted thinners to flow into all of the recesses.

DRY BRUSHING AND HIGHLIGHTING

All the rage when I were a lad!

Seems to be mentioned less and less these days, but still a good technique to further emphasise details after washes. Quite the opposite to washes, very dry paint (enamels, acrylics or oil paints) in a lighter shade of the colour to be highlighted, don't use your best brushes as you need to scrub almost all of the colour from the brush (a piece of kitchen paper works fine) and tease the brush gently over the raised detail and edges. Work gradually, harsh and heavy dry-brushing doesn't look realistic.

When mastered, this technique can be used to fade and blend ►



Tech Guide - WEATHERING



To simulate where the paint has worn away from the lip of this T70 driver's hatch, a sharpened HB pencil is being run backwards and forwards along the lip. This effect works best on a base coat of dark browns, greys and greens.



By using the tip of the pencil, a polished edge can be added to the smallest chips. The actual chips are created by first painting with a lighter shade of green than the base colour camouflage, then in the centre of these light patches a black/brown or black/grey can be added. The idea is to give the two dimensional paint effects a three dimensional look.



The finished hatch rim. Using a sharpened pencil gives a nice subtle scale sheen, which looks far more realistic than using silver paint and a fine tipped brush.



Graphite powder applied with a fibre tipped pencil is the perfect medium for 'polishing' larger areas of bare metal, such as the running surfaces of these King Tiger road wheels.

► camo colours, some modellers even use dry-brushing methods to apply soft edged camo patterns, worth trying if you haven't yet purchased an airbrush.

I also use a lightened tone of the base-coat to detail paint highlights such as, bolt-heads, grab rails, hinges and panel edges. All benefit from highlighting to enhance depth and detail when dry-brushing would be too subtle.

MUD AND DIRT

Heavy dust and mud can easily be created with pigment powders, which are now readily available in many shades, or artists pastel

chalk sticks which need to be ground on coarse sand paper. The commercially available pigments come in some good earth tones and work well mixed with acrylic medium. Anything which will build a texture will work, flour and talc are old favourites- even real earth dried then ground to a powder mixed with PVA glue or varnish. Very heavy mud here was applied with a mix of model filler and static grass used for ground work. Pigment powder can also of course be used dry for dust, rust, soot etc.

DAMAGED PAINT AND SCRATCHES

An easy method for chipped and

scratched paint is using a small piece of sponge with a small amount of paint applied and dabbed off before touching against selected areas of the model. I find acrylic paints work well for this, a nice dense colour like dark brown or dark grey, try on some paper until the marks left are tiny and random. Further scratches can be done with a very fine brush or if you're not confident yet with fine brushwork, snap a cocktail stick and dip the fine splinters in the paint achieving some fine lines.

It's easy to get carried away with the chipped paint- best again to look at reference of real vehi-

cles for ideas.

I use a soft, sharp pencil to apply further scratches and give a metallic sheen to areas of high wear such as handles, steps and track parts.

CONCLUSION

Like many of you I'm sure, I struggle to find the time to model. The materials I use allow me to split a model into sections when painting and not have to wait long for paint drying, completing that section to almost the final stage feels like I'm making some progress, even if it's painting a couple of tools in half an hour it's still progress! ■



In this photo we can see the use of a pin wash to accentuate the bolt heads on the central hub of the rear idler wheel. Also visible is the metallic sheen on the inner face of the road wheels produced by running the tip of a sharpened HB pencil around each rim.



Pigments are not only great for adding realistic mud effects, but are also perfect for giving exhaust systems a realistic finish.



The subtle effects of the filters and washes can be seen on the grey camouflage finish of this Panzer III. Note also the paint chipping effect created with the sponge below the turret side escape hatch.



Here the effects of the gouache water based paint can be seen. The gouache is a good medium for replicating heavily weathered dusty finishes as it can be easily manipulated or washed away with water.



On this Panther we can see the use of localised dark washes to replicate the lubricating fluid stains around the wheel hubs. Note also the scratches added to the side skirts using a fine pointed brush and thinned acrylic dark brown paint.



The heavy build up of mud on this Panzer III was created by mixing filler putty and hemp 'grass'.

THE PERFECT STURM?

Pete Usher returns from a modelling break to build AFV Club's formidable looking Sturmtiger.



After a few months off from modelling due to work commitments, I thought the AFV CLUB Sturmtiger would be an ideal way to get me back in the saddle as it were. The kit was going to be built almost completely out of the box and I can say bar five tool catches and a length of scale chain, no aftermarket products were used.

HISTORY

The Germans learned a valuable lesson in the battle of Stalingrad. Large artillery shelling was the only way to clear a built up area at speed and that is why the Sturmtiger was developed. Carrying a 38cm rocket launcher, it could blast its way through an objective giving the infantry full support. Most of these vehicles were used in the defence of Germany at the very end of the war but some saw combat in the Ardennes during the Battle of the Bulge.

ZIMMERIT

Before the main construction can begin the horizontal panels needed to have the zimmerit anti-mine paste applied. I have developed a technique using No More Nails - a PVA based construction product which is perfect to recreate the ridged effect in scale. But above all it's fast and the whole tank can be fully 'zimmirated' in less than an hour. I described in depth the process, with photos a few months ago back in issue 12 on a Tiger 1.

WHAT'S IN THE BOX

There are eight sprues carrying most of the plastic parts, only the turret and lower hull are separate in the box. There is a set of rubber tracks, (I will get on to them later) some etched brass engine grille screens and a barrel insert with rifling grooves. There are no decals provided, not even a set of Balkenkreuz.

SUSPENSION

As usual construction starts with the suspension. AFV seem to be running with movable suspension in all of their kits. This is a great feature if you're putting the tank on an uneven diorama. This is where I found my first of many (I'm sorry to say) problems. The drive sprockets don't have any locating point so be sure to line up the teeth correctly or the tracks won't fit. I found it best to fit the sprockets onto a length of track, this guarantees that they will be lined up perfectly.

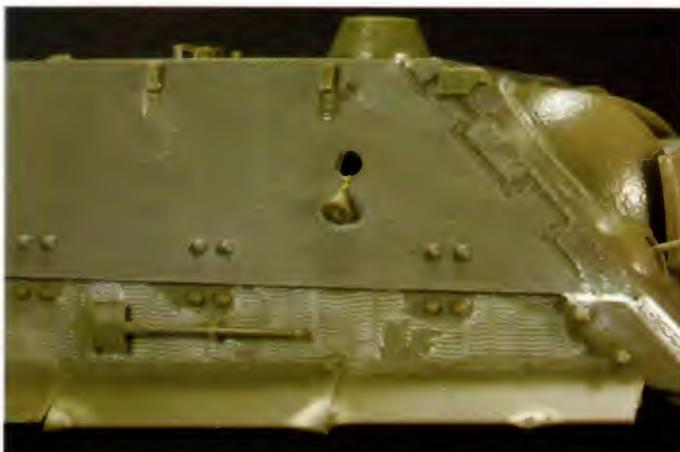
The build continued well, until I started on the engine deck. Firstly, the tools moulded within the grille openings on the deck plate need to be removed (no doubt this has been done to make best use of any empty spaces within the sprues). Removing the tools proved tricky, due to the engine deck being so thin which is great if you're going to have the engine exposed but why store other parts of the kit within these delicate pieces? The only other problem in this area was that the engine grille locking catches were missing from the instructions, but they are on the sprues! You just need to find them.

MAIN GUN

The main gun breach is highly detailed and can be fixed in the open or closed position. I went for the latter option as I was not going to be fitting an interior nor did I have any projectiles to fit into the launcher tube. I used the Liquid Poly technique to give the mantlet a rough cast texture by stippling the glue on with an old stubby paint brush. AFV have thoughtfully supplied an etched brass barrel liner complete with grooves to represent the rifling. I shaped the liner by rolling a pen backwards and forwards over it on a cutting mat, by doing this repeatedly it creates a perfect cylinder without



The figure came from Dragon's Panzer Grenadier set (6305). Some minor surgery was needed to get the figure to hold the heavy MG42 in a realistic manner.



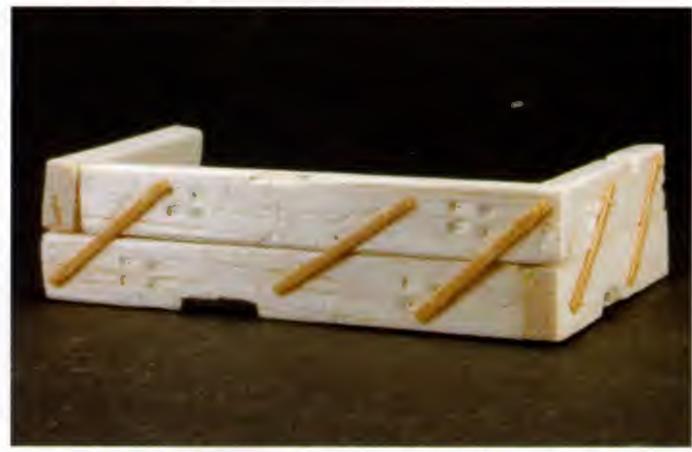
AFV Club have done a very good job of replicating the rolled steel armour plate of the superstructure as well as the weld seams and cast texture of the mantlet.



Some minor battle damaged was added to the fenders to help show the vehicle has seen some action during vicious street fighting, so reminiscent of the closing days of WWII.



The author used a product called No More Nails, which is a PVC based glue. A full description of this technique was featured back in Issue 12.



The makeshift railway sleeper 'bunker' placed around the edge of the engine deck was made from strips of balsa wood. The idea being that any supporting infantry wouldn't be 'sitting ducks' if riding on the back of the vehicle.

any kinks or creases. The liner was inserted into the tube and thanks to the 'springy' nature of the brass, fills the tube perfectly. Once happy with its final position it was fixed in place using super glue.

RAILWAY SLEEPER PROTECTION

From the reference I found that this vehicle worked closely in an infantry support role, so to add a bit of interest to the tank I thought I would add a single figure riding on the rear deck as the vehicle picks its way through a built up area. The figure comes from Dragon's German Panzer Grenadiers No.6305. It took a bit of cutting and filling to get the figure to look like he is actually holding the heavy MG42 machine gun in a natural and realistic way, and so with the addition of a resin head he was ready for painting. The railway sleeper protection popped into my head at work one day when I saw a stack piled up. I made mine out of some balsa wood that I cut to be roughly the right length and scale and super glued them together.

PAINTING BEGINS

As always the painting process begins with a coat of Halfords

White Primer. Some parts are left off i.e., tool catches and the projectile loading hoist to protect them from damage during handling. To start the camouflage scheme I first sprayed on a coat of Tamiya NATO Green XF-57, thinned with Tamiya thinners at about a 60/40 ratio with the pressure set at 25 PSI. This colour was applied onto all of the model, minus the road wheels. Blu-Tack was then rolled into thin sausage shapes before joining the ends and making a 'donut' shape, these 'donuts' were then stuck on to the hull and superstructure. A mix of 80% Vallejo Air 71025 Panzer Yellow and 20% 7001 Matt White was mixed to make my dark yellow colour. I find these paints very good to use but they need to be built up over 2 or 3 thin coats or they will tend to run. Try to avoid overspray, but don't worry too much as the other red-brown colour will be used to cover any affected areas. The donut can be used four or five times before paint starts to

build up on the Blu-Tack. I changed the shape every time to make the patches a bit more random.

To make the last of the camouflage colours, I mixed up Tamiya Red Brown XF-52 Flat Earth and Tamiya Red Brown XF-68 in a 25/75 ratio. This red-

brown mixture was then sprayed between the other two colours. Once I was happy that the scheme looked appropriate for a late war vehicle, the model was given a gloss coat using Johnson's Klear in preparation for the weathering process. ►





With the construction complete. The first stage of the painting process involved giving the model a coat of primer. The author has used a can of Halfords acrylic white aerosol car primer.



For the base colour of the camouflage scheme the author used Tamiya NATO Green XF-67.



The Dunkelgelb (dark yellow) was applied next using Vallejo Model Air Panzer Dark Yellow mixed with White. Blu-Tack 'donuts' were used to help apply the colour by ensuring a tight demarcation.



A mixture of Tamiya NATO Brown XF-68 and Flat Earth XF-52 was used to make up the last of the three camouflage colours.



The author used thin strips of wood to help press the top run of the single-piece vinyl track down onto the wheels whilst the super glue applied to the tops of the wheels was setting.



The weathering process was started by applying a colour wash using Burnt Umber oil paint from Van Gogh thinned heavily with white spirit. The wash will help to accentuate all surface details on the model.



Once the wash had been allowed to dry fully, the model received a coat of Vallejo Model Color Matt Varnish with a couple of drops of Iraqi Sand. Adding the sand helps to tone down the overall camouflage effect, for a more true to scale appearance.



The last stage of the weathering involved adding a muddy paste mixed from Mig Productions Pigments to the running gear and lower hull.



One of Great North Roads plaster-cast cobble-stone bases was chosen for the basis of the ground work. Tamiya Panzer Grey was used for the base colour of the cobble stones.



The next process was to add small patches of plaster to start building up the areas to receive the rubble.



Once the plaster had dried PVA glue was brushed on followed by a coating of fine sand which was carefully built-up until the glue had soaked into the loose sand.



Once the sand had soaked up the excess glue, Great North Roads bricks were sprinkled on then fixed in place with diluted PVA glue dispensed from an old syringe.

► TRACK TIME

The single piece vinyl tracks were next to go onto the model, and being the 'rubber band' type I would need to glue them onto the road wheels to achieve the distinctive 'track sag' seen on all Tiger I's. To do this, thin super glue was applied to the tops and the bottoms of the road wheels, then thin strips of wood were wedged into the gaps between the tracks and the hull while the glue set, to create a realistic track sag.

The soft vinyl tracks proved

problematic to paint, being so soft and flexible the paint just wouldn't stick. To get over this problem I turned the pressure right down on my compressor down to its lowest setting to stop the paint lifting. In hindsight single-link tracks would have been a far better option.

WEATHERING

To start the weathering process the whole model received a wash of heavily thinned Burnt Umber oil paint. Once this wash had been allowed to dry, the tracks and

running gear were sprayed with Tamiya Flat Earth XF-52 thinned 50/50 with Tamiya Thinners. It was now time to 'matt down' the model before adding the final weathering using Mig pigments, as these pigments obviously adhere much better to a matt finish than a gloss one. My choice of matt varnish was Vallejo's Model Air Matt Varnish No. 520, to this I added a couple of drops of Model Color Iraqi Sand 819 to help tone down the camouflage colours and give the vehicle a slightly dusty finish.

Next Mig Productions Europe Dust P028 with patches of Dark Mud P033 were worked into the lower half of the kit especially around the running gear and rear hull to simulate a heavier build up of dirt and grime.

FINISHING OFF

The tools were picked out next, using a base coat of Andrea Color Matt Black 26 before brushing on Mig Productions Europe Dust P028 while the black is still a little wet. The tool handles were picked out using various Vallejo acrylics before adding some small scuffs and scratches using Vallejo Black/Brown and Black/Grey.

CONCLUSION

A mediocre kit when it's built, and one that definitely has room for improvement. Great if you're looking to get back into airbrushing as the paint schemes on a vehicle like this are impressive to say the least, especially the 'ambush' style schemes (see our full size reference section). Would I buy the AFV kit over the Tamiya one with a good brass set?....No. ■



A light dusting of snow was applied, by first air-brushing the base with matt varnish and while the varnish was still wet Bicarbonate of Soda was sprinkled on from a height of about half a metre to ensure a light even coverage.



The Panzer Grenadier has made himself at home here with a supply of weapons and ammunition, including stick grenades and a panzerfaust.



The Mig Productions pigment are the perfect medium for creating these mud encrusted wheels and tracks.



Just visible is one of the crew members peering out from the gunner's sighting aperture.

Modelspec

AFV CLUB 1:35 STURMTIGER 38 CM RW 61
STURMMORSER. TIGER
KIT NO. AF35103

Paints & pigments used

Tamiya XF-63 German Grey
Andrea Color Matt Black 26
Vallejo Air 520 Matt Varnish
Vallejo Air 70819 Iraq Sand
XF-52 Flat Earth
XF-68 NATO Red Brown
Tamiya NATO Green XF-57
Mig Productions Rubble Dust P234
Mig Productions Europe Dust P238
Mig Productions Dark Mud P033
P234 was worked into some areas

Detailed moveable suspension.

Poor sprue layout making part removal difficult without causing damage.

Available from

All good model shops Worldwide.

Rating





36 IN 1:6TH

Graeme Carruthers checks out Dragon's latest piece of hardware for their 1:6 action figure range.

The Pak 36 has seen many incarnations in plastic, from Tamiya's old kit that gave you the cool looking barrel launched grenade projectile to the recent Dragon version found on its own or part of kits such as the 251 halftrack series. These are all in 1:35 scale and are quite small kits, but this version is, well its enormous. The wheels are over 13cm in diameter and the trailing arms are over 40cm long. You are going to need a large house to display this model!

Unlike the recently reviewed kettenkraftrad this kit doesn't have

the parts in separate bags they are for the most part attached to large sprues just like an ordinary model kit. The main large parts such as the trailing arms and gun barrel are split lengthwise and will need careful fitting and sanding to hide the joins. At this size you would have imagined that the kit's details could be rendered in true scale and the side description on the box does mention the gun shield is 'true to scale' but the shield is bevelled like the 1:35 scale kit. This looks unconvincing on such large pieces of plastic and because of the moulded-on bolts and other

features, sanding the bevel down to hide it will be a difficult chore. The edge of the crew recoil guard plate is also a bit on the thick side and would be difficult to thin down requiring you to perform some surgery and fit a plastic card replacement to enhance this area.

A nice feature is that the gun shield is split and the top half can be folded forward, this is done by making a number of two part hinges and inserting a plastic pin to hold the halves together. Another great feature is the inclusion of two ammo boxes with all the handles and catches as separate

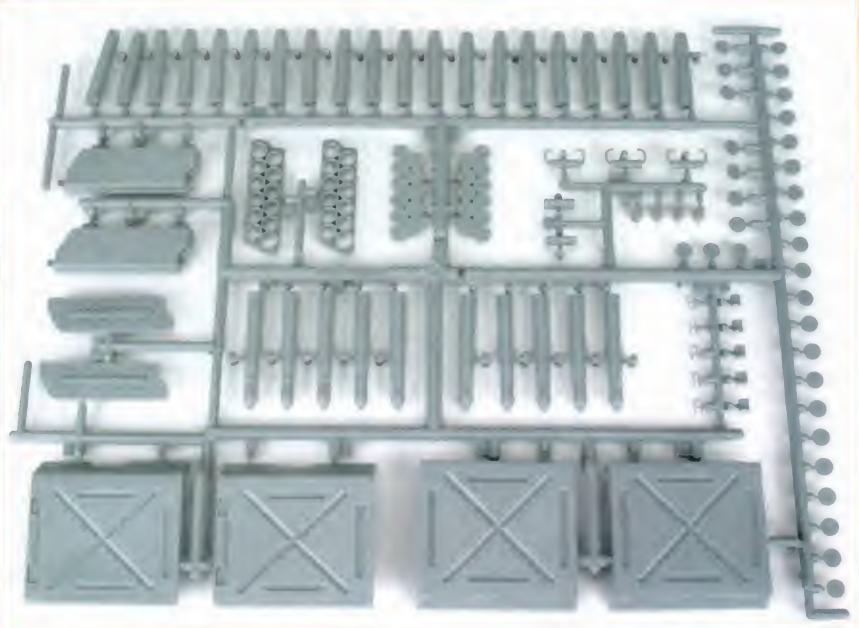
pieces. Also included are twenty spent and nine full shells, the shell base plates are also separate.

All in all this is an impressive, large kit and has lots of nice bolt detail and nice workable hinges but it is spoiled by some thick pieces of plastic and the bevelled gun shields. These you could get away with in 1:35 scale but at 1:6 scale they are too obvious. This kit will appeal to those out there who like to collect their battle barbies as this model would look good with crew and for modellers who fancy something completely different. Recommended. ■



The wheels and gun barrel resting against Dragon's 1:35 88 Flak 37 box gives a good idea of the size of this model.

**DUE SOON
FROM BRONCO**



The kit comes with the option of having the shield in the raised or lowered position.



USA 1/35 Scale Humber Scout Car Mk.II w/ 20mm Gun (D-Day Version)



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Humber Scout Car Mk.II

USA 1/35 Scale Humber Scout Car Mk.II w/ 20mm Gun (D-Day Version)



CB 35021 £TBA
Staghound Mk.III

USA 1/35 Scale Piper Cub L4H "Rosie the Rocketeer"



CB 35018 £TBA
Piper Cub L4H "Rosie the Rocketeer"

France 1/35 Scale French Hotchkiss H38/39 Light Tank



CB 35019 £TBA
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Ian McGonagle takes a look at IMA's Churchill Bridgelayer conversion.

WINSTON'S WONDER

The British Army learned from experiences gained on the battlefield that you not only have to overcome the enemy but you must command the battlefield and with that in mind the British set about designing vehicles to take all events and terrain into account. As an evolution of the Valentine and Covenanter bridgelayers the 30ft No 2 Churchill bridgelayer came about in 1944 to be deployed to aid the taking of Fortress Europe.

Kits and conversions based on the Tamiya Churchill are a plenty, indeed the Churchill must be one of the most converted allied armour kits around. Maybe it's down to the extent the Churchill was adapted to carry out the many invasion tasks.

The I.M.A. kit comes in a stout plastic box sealed with black masking tape, a brief, concise label gives you the description of the contents and I.M.A.'s web site address (www.imaco.hk). Within the box, laid out in an ordered fashion are the component parts for the conversion, every medium possible has been employed to provide the modeller with the perfect kit. I.M.A. include the correct sized tubes and L section etc so doing away with the hunt for those small but essential items, something most resin kit

manufacturers fall short on.

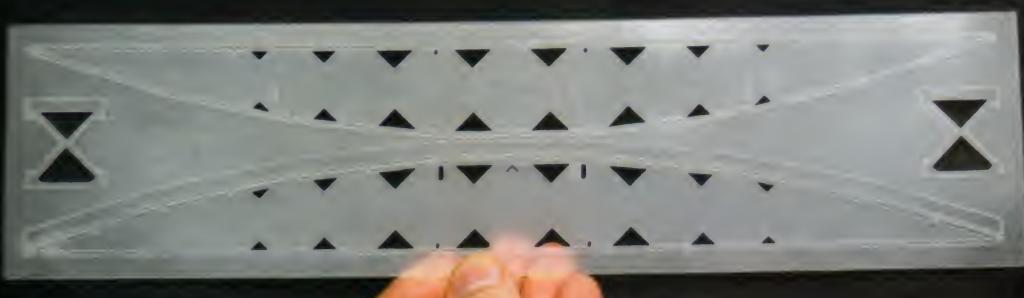
Three double sided, A4 black and white pages are your guide to the construction of this kit. Clear three dimensional drawings and an in depth text first take you through the conversion of the Churchill upper and lower hull. A small amount of cutting is needed to allow the alteration of the hull with attention being paid to the front, rear and both sides. Care and attention must be taken throughout these steps, as it will affect the assembly of the 'A' Frame. All through these steps you should consider what you want to add to the basic kit, tracks etc. Only after following Tamiya's instructions, adding any extras such as etched brass or tracks, and the thirteen steps in I.M.A.'s instruction sheet are you ready to start the bridge deploying gear.

The bridge support and lifting mechanism are brought together and assembled on the hull, a large proportion are grey plastic moulded parts with no flash, throughout the conversion you are struck by the crispness of the moulded components. The lifting arms, fixed and moving, are assembled and with the turret blank installed you can set about assembling the hydraulic cylinder with its support framework, again the instructions keep you informed as to the position and

material you need to perform the step. The final stage in this section is the deployment arm. The use of laser cut plastic card comes into its own here, the crisp profiles are a massive plus. Normally you would expect these parts to be provided in warped resin/plastic or to supply you own plastic card only to have to cut out the profile, I.M.A. give you these component parts in laser cut plastic card.

Finally to the bridge, four stages take you through the assembly, all using the laser cut plastic card. Here the crisp detail and form stands out, as with the steel on the real vehicle, the precise right angles of the structure are replicated due to the high standard of the manufacturing process. The highlight is the tread plate for the bridge, the highly detailed section has to be seen to be believed.

To summarise, this is the next generation in multimedia conversions just as the model manufacturers have progressed to next generation kits. If you are prepared to shop online you can get this conversion for a more than reasonable price and the fact that everything you need is in one box saves you money. A great conversion which will add a fascinating subject to your collection. Highly recommended. ■



DANUBE DEFENDER

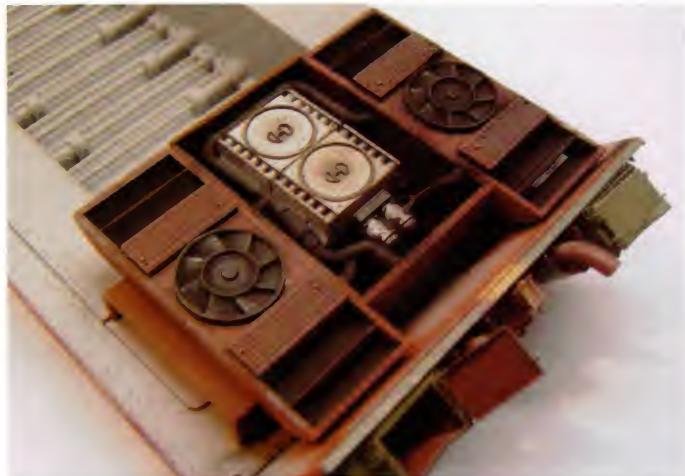
Dennis Brandle describes the build of his Dragon Panther Ausf.G and all the extra detailing added.

The Panzerkampfwagen V Panther is one of the most famous tanks in the world and the subject of many publications, so no need for further explanations at this point. Just a few details concerning the Ausfuehrung G Late Production, which this kit represents:

Basically, the 'G' variant was identical to the earlier 'D' and 'A' variants and only small details were improved on the Ausfuehrung G, for example different hull-sides, new hatches for driver and radio-operator, as well as a new exhaust-system.

The Ausf.G was built by MHN, Daimler-Benz and MAN from March 1944 until April 1945 and was the Panther variant with the largest production number with about 2900 vehicles being produced. The Late Production vehicle is easily recognisable by its chin-mantlet, raised heater and the larger flame-dampening exhausts. Some vehicles made by MAN were equipped with a rubber-saving steel-wheels on the last wheel station.





The engine ventilation from the kit is quite detailed. The Maybach engine from Tamiya only fits with thinner walls made from styrene

MODELLING THE PANTHER G

The new DML Panther kit consists of about 650 parts, which is quite a difference compared to its older DML sibling, which only had about 300 parts. Since the new kit is a 'Smart Kit', most parts are produced with the new 'Slide-Mould' technology, which offers superb detailing. Even though this kit is at the leading edge of injection plastic tooling, I still felt there was room for some extra detailing. I therefore decided to use a combination of PE parts from Voyager, Aber and LionRoar for this. As well as having the edge when it comes to detail I find it much easier to inflict battle-damage to brass parts than on the equivalent plastic parts. I also used

metal tracks from Fruimodel and a turned aluminium barrel from Aber.

I had the opportunity to use some of the new resin parts from Tiger Model Designs (TMD) for the new Panther G - thanks to Scott Negron from TMD for his much appreciated help!

The assembly begins with the suspension and the wheels, which can be built workable, as in the Tiger 3 in 1 kit. There are some problems concerning certain optional parts, as there is no information provided

- so, some research before assembly is required. There are small pins on the suspension arms and the hull, which have to be cut off to make the suspension workable. In my case, the tank proved to be too heavy for the suspension which made the tank sit too low. I fixed that problem

quickly by gluing two suspension arms on each side.

DML included a set of nicely detailed engine cooling units, so you won't see the empty inside of the tank through the louvres. As there is no engine provided by DML, I used the Maybach engine from Tamiya and added some wires. The engine-walls had to be removed and remade with styrene, because there wasn't enough space for the thick Tamiya parts. Before starting the model, I decided to build an earlier Panther G, like the ones used during the Battle of the Bulge and so I replaced the flame-dampening exhausts with earlier Panther G exhausts from Tamiya, since those are not included in the kit.

The rear-plate was a very tight fit between the hull-sides and I had to use super-glue to assemble it. The rear stowage bins were replaced with Aber items (again, Voyager's PE parts were the wrong size).

I continued with the upper hull and created a cast texture on the ball-MG mantlet using a rough brush and some liquid-glue. The driver's and radio-operator's hatch were replaced with resin items from TMD. The kit fenders were removed and replaced with PE parts from the Voyager update set, because I wanted to make them look damaged, which is a lot easier with PE. Unfortunately, the Voyager fenders do not fit very well so I had to damage the PE in such a way that this fact is not easily recognisable anymore.

The problem with many Voyager PE parts (especially larger parts) lies in the fact, that the Voyager set PE 35058 is made for the older DML and Tamiya kits and those have minor differences concerning the measurements.

The tools and equipment on both hull sides were further detailed ►



Note the fine rain guard above the mantlet from TMD. The kit part is too thick. The triangular part behind the guard should be sanded down so that the debris guard fits well. Just use the weld-marks on the turret edge for correct alignment.



The Aber photo etched stowage boxes have been improved with clasps from Voyager.



For the tow cables, the author used the soft copper cable from the Voyager update set with the nicely detailed ends supplied in the Dragon kit. Note also the TMD corrected turret rear plate.



The exhausts were taken from an old Tamiya kit and the exhaust covers are from the LionRoar PE set. The battered stowage bins add some visual interest.



The completed model ready for painting. Here we can appreciate the working suspension and the fully articulating white metal tracks from Fruimodel.

with PE parts and balsa wood. Be aware that parts K1 and K5 are swapped in the instructions!

During the assembly of the engine-deck the raised heater was given a cast texture and was refined with some PE parts and bolts. I used the kit's engine grilles as they fitted perfectly over the louvres. Please notice that only the right grilles are equipped with the covers, either A29 (open) or A27 (closed). A wing-nut should be placed on each corner on the right side, which are provided on sprue E, but not mentioned in the

instructions.

I used an Aber metal barrel for the turret as I unfortunately damaged the kit's muzzle-brake during assembly - otherwise, the metal barrel is not necessary at all. The gun mantlet from TMD has a very nice casting number, casting seam and a great rain guard - very recommendable!

The rear-turret armour plate was also replaced by a TMD resin part, as the hatch is 1mm off. The TMD part even has nice welding seams on it. The edges of the angled turret armour on each side

of the rear plate were reworked with a modelling-knife to create a torch-cut look.

The commander's cupola was also reworked and was given a casting structure. Part B51 should be replaced with PE or scratchbuilt from styrene, as it is otherwise too thick.

Be careful when assembling the turret front and mantlet to the turret, without reworking the parts, there will be some fit problems. Part B20 should be cut somewhat or just use a very thin PE or resin part instead. In any case, the weld-

seams at the turret edge should be aligned properly.

The kit's towing cables are just too crude and should be replaced - at least, DML gives the correct length and the kit includes some very nice plastic loops. I used the towing cables provided with the Voyager update set.

The rails on each side (parts C1 and C47) were replaced with PE parts and side-skirt-brackets, and some side skirts (Schuerzen) from LionRoar were used, as well as a Antenna base from DML antenna-set No. 3819.



The Panther's commander came from Dragon's Armoured Reconnaissance Wiking Division (6131). He has received a new resin head from Hornet and a new belt from Aber and insignia from LionRoar.



The author painted the Commander using Calvin Tan's excellent book 'Modelling Waffen-SS figures'.



Prior to the weathering-stage, the camo looked pretty gaudy... but after filters, washes and dust has been applied, the kit looks entirely different. The author used the F.A.Q book by Mig Jimenez to guide him through the weathering process. For the filter used to tone down the 'gaudy' base colours the author used a beige-brown colour mixed from Burnt Umber, Ivory and Titanium White oil paints thinned heavily with turpentine.

The assembly of the gun-bracket, the road wheels and the tracks are finishing up the kit. Note the very nice turret-ring, which is sadly covered when the turret is in place but offers nice detailing for any workshop-diorama. Finally, the upper and lower hull were glued together and the assembly is finished!

PAINTING

I applied the camouflage pattern using the airbrush and a self-made drawing of the camo-scheme as a painting reference. I didn't want to build a specific Panther G, but rather one 'unknown' vehicle. As I knew of at least 2 Panther Gs of 4th. Company 2nd SS Division "Das Reich" during the Battle of Vienne in April 1945, I depicted my Panther as one of these. As there were no pictures available, I took the liberty to use my own camouflage-scheme.

I started using Oxide-Rust as a base coat, using a mixture of XF-7 Flat Red, XF-9 Hull Red and XF-15

Flat Flesh in a 2:2:1 ratio. I added Dark-Yellow stripes, using a 1:2 ratio mixture of XF-2 Flat White and XF-60 Dark-Yellow. Finally, I applied Gunze Sangyo H405 Flat Olive Green. The larger areas were each high lighted using a lighter tone.

When I started the weathering, I used the book 'F.A.Q' by Miguel 'Mig' Jiménez. According to his instructions, I started by applying



applied to enhance the detailing.

The chipping was the critical stage of the weathering process - too much just looks bad and unrealistic - too little, and it just doesn't seem right either. So, the keyword is balance! The chipping was done with a piece of a sponge and Dark-Brown acrylic paint (mixed with XF-64 Red Brown and XF-69 NATO Black in a 1:1 ratio), which

Yellow and XF-64 Red-Brown. All horizontal surfaces were then (more or less heavily) dusted with MIG pigments (P027 Light Dust, P031 Vietnam Earth, P033 Dark Mud, P234 Rubble Dust) and rubbed in using turpentine. This way, the dust gathers naturally in corners and edges and only light dust remains on plain surfaces. Remains of dried mud were

applied on the hull and suspension using the same MIG pigments again, this time mixed with plaster and MIG acrylic resin. The turpentine not only dispenses the pigments properly but also fixes them.

The exhausts were treated with rust-coloured MIG pigments (P024 Light Rust, P025 Standard Rust and P031 Vietnam Earth), and certain more heavily chipped areas were additionally finished using graphite-powder from an old pencil, to get a metallic finish.

Some oil and gasoline-traces were applied on the engine-deck using oil (1:2 ratio mixture of

“ Since the new kit is a 'Smart Kit', most parts are produced with the new 'Slide-Mould' technology, which offers superb detailing. ”

a coat of Vallejo Model Air Acrylic Gloss Varnish clear varnish and added the turret numbers using Stencilit stencils and XF-2 Flat White. Then, a Beige-Brown filter (mixed with Burnt Umber, Ivory Black, and Titanium White oils) with lots of turpentine was added, to blend in the camouflage colours better with each other.

After a break to let the filter dry, Dark-Brown washing (using Burnt Umber and Ivory Black) was

was dabbed on the surface. Larger scratches and chips were applied with a 10/0 brush. Some single scratches and chips were further refined with light rust-streaks using Burnt-Sienna oil-paint. The same method, just on a larger scale, was used on the track-links on the turret and the hull-sides.

The first layer of dust was made with the airbrush and very thin Beige acrylic colour, which was mixed using XF-60 Dark-



The grilles of the engine ventilation are depicted as having been hit by shrapnel. The open stowage box is a nice detail and adds life to the model.



Having the engine access hatch open helps add some colour to the model by showing off the red primer of the hatch interior and the white painted air cleaner covers.



Note the heavily weathered spare track links on the hull side. To add some variety, the tracks were painted in different colours.



Gunze Mr. Metal 213 'Stainless' was used for the bare metal on the wheels. Note the shrapnel damage on the road wheel and the bent and battered side skirt support.

► Burnt Umber and Ivory Black), as well as oil-stains on some of the road wheels.

TRACK PAINTING

The tracks were removed from the kit after the assembly was complete and were covered with Gunze Mr. Metal Color 213 Stainless and received a heavy washing with Dark-Brown (Burnt Umber and Ivory Black) oil-paints. The contact areas between wheels and tracks were masked with tape and the rest of the tracks were then airbrushed with a 1:1 mixture of XF-64 Red-Brown and XF-69 NATO Black. I used a cotton swab to polish the Gunze Stainless Color. Afterwards, a second washing, again with the same Dark-Brown, was applied. Finally, the tracks were dusted with MIG pigments in a rusty-brown tone, using P027 Light Dust PO31 Vietnam Earth, PO33 Dark Mud, PO39 Industrial City Dirt and P234 Rubbel Dust. Graphite-powder was rubbed with a finger over the edges and the guide-horns. Finally, the finished tracks were attached to the tank.

TANK COMMANDER

The tank commander figure is from the DML set, Armoured Reconnaissance Wiking Division (kit no.6131) and was updated with a PE belt (Aber set no.35A21) and some LionRoar PE insignias (LAM 007), as well as Hornet resin head wearing a Waffen-SS officer crushed cap (HGH08). I had to cut off the lower legs, thus creating a figure, as the legs didn't fit through the hatch. Both sleeves were hollowed out and the right hand was replaced by another from my spares box. For painting reference I used Calvin Tan's book 'Modelling Waffen-SS figures'. I primed the figure with XF-69 NATO Black, then dry-brushed it with a oil-paint mix consisting of Burnt Umber, Raw Sienna and Titanium White Raw Sienna (ratio 2:2:1), which created the Beige base colour for the uniform. I dispensed the colour with a brush damped with turpentine. An additional dry-brush with a lighter tone of the respective base colour was made to achieve some highlights and shadows.

The camo-pattern was applied using Dark Green oil paint (1:1:2:1 mix of Ivory Black, Burnt Umber, Sap Green and Titanium White) and Desert Yellow (2:2:1 mix of Raw Sienna, Burnt Umber and Titanium White). The uniform received larger areas using both these colours. Small dots of Desert Yellow and Light Green (1:1 mix of Sap Green and Titanium White) were added, followed by small dots of Dark Green and the Beige base-colour. The application of a light washing with Burnt Umber and some dry-brushing finished up the pea-dot uniform of the commander.

The head and hands received a base-coat with XF-15 Flat Flesh and a washing with Burnt Sienna. A flesh colour was mixed with Burnt Sienna, Raw Sienna and Titanium White oil paints (1:1:1 ratio) and then dry-brushed. Details such as eyes, lips and hair, as well as the officer's cap, the insignias and rank badges were done with a 10/0 brush.

After the head, headphones and binoculars were attached, the commander was ready to be inserted into the cupola.

CONCLUSION

DML's Panther G is probably the best kit of this famous tank currently on the market. Although right 'out of the box' with great details, the kit can be a real masterwork using aftermarket parts. This article is based on the first DML Panther Smart-Kit (Late Production no.6268) and the newer Panther G kit (Steel Wheels no. 6370) is even better, as it offers the possibility to build earlier Panther G variants and has some improved details.

Anyway, the new Panthers are a definite must-have for all fans of late-war German AFVs. ■

Modelspec

1:35 DML WW2 Sd.Kfz.171 Panzerkampfwagen V 'Panther' kit No.6268

Paints used

Tamiya Acrylics: XF-1 Flat Black, XF-2 Flat White, XF-7 Flat Red, XF-9 Hull Red, XF-15 Flat Flesh, XF-60 Dark Yellow, XF-64 Red Brown, XF-69 NATO Black
Gunze Sangyo Acrylics: H405 Flat Olive Green, 213 Stainless
Vallejo Model Air Acrylic: 058 Gloss Varnish
Revell Enamels: 2 Clear, 8 Flat Black, 54 Blue, 56 Flat Blue
Testor's Enamels: FS17178 Chrome Silver
Schmincke Oils: Burnt Umber, Ivory Black, Titanium White, Burnt Sienna, Sap Green, Raw Sienna

Detailing sets used

Friulmodel workable tracks (ATL-08), Aber Rear Boxes for Panther (35A91), Voyager Model Panther Ausf.G (PE 35058), Lion Roar Panther Ausf. G (LE 35007), Aber Gun Barrel (35L04), Tiger Model Designs Panther G Reinforced Gun Mantlet (3515800), Tiger Model Designs Panther G Rear Turret Armour Correction (3516304), Tiger Model Designs Panther G Hull Hatch Correction Set (3516307), Stencilt German Panzer Number (S1027)

References

New Vanguard 'Panther Medium Tank 1943-45', published by Osprey Publishing, ISBN 1-84176-543-0
Osprey Modelling 'Modelling Waffen-SS Figures', published by Osprey Publishing, ISBN 1-84176-837-5
DML Panther G 'Smart Kit' Tweaks List and Picture CD, published by Tiger Model Designs as CD-ROM (351600)
www.Panther1944.de (great website with tons of info, although in German language)

✓ Pre-cut single track links with hollow guided horns, two different gun mantlets and engine covers, workable suspension.

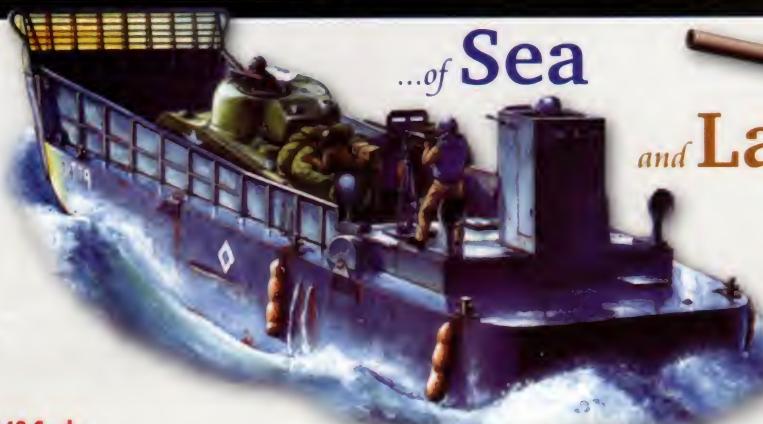
✗ No information about optional parts, movable suspension works only with movable tracks, side-skirts not included, markings provided only for three paint schemes.

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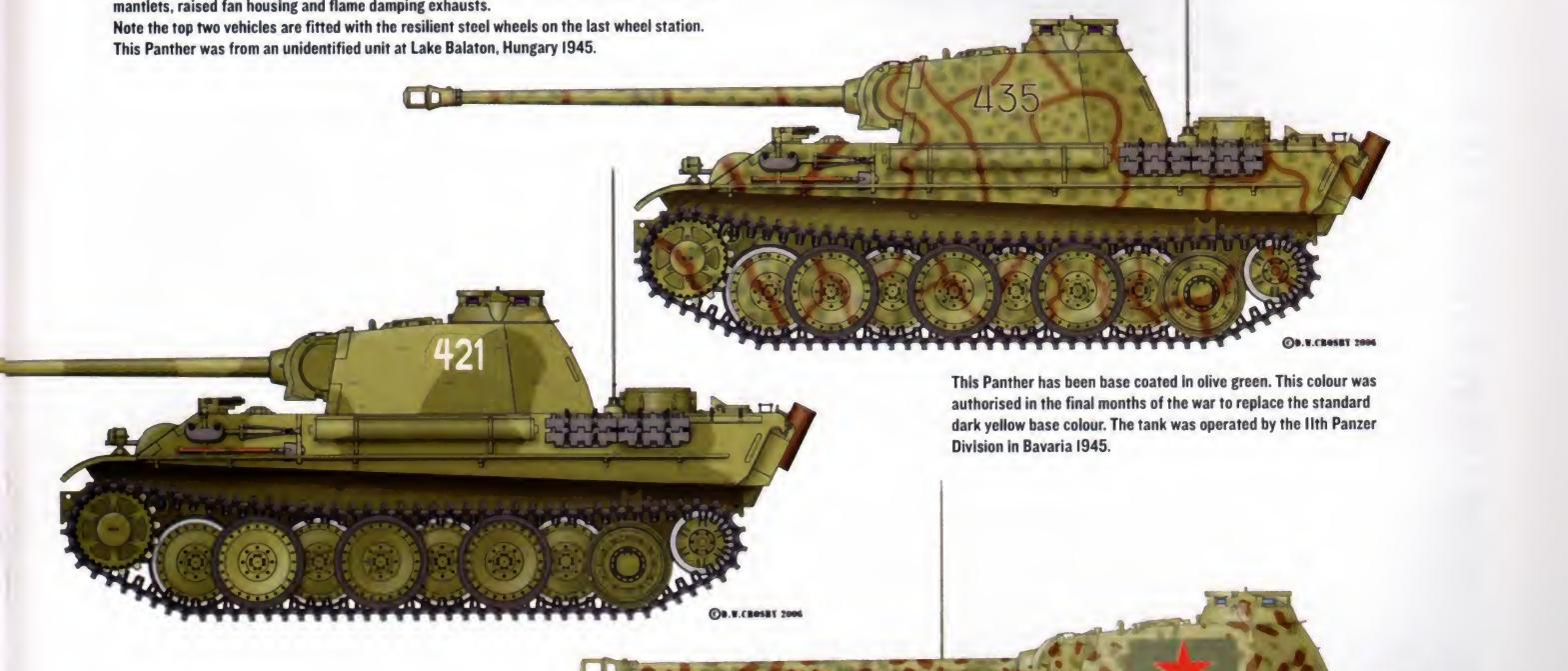
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These three Panther G's are all fitted with the typical late model features, including chin style mantlets, raised fan housing and flame damping exhausts.

Note the top two vehicles are fitted with the resilient steel wheels on the last wheel station.

This Panther was from an unidentified unit at Lake Balaton, Hungary 1945.

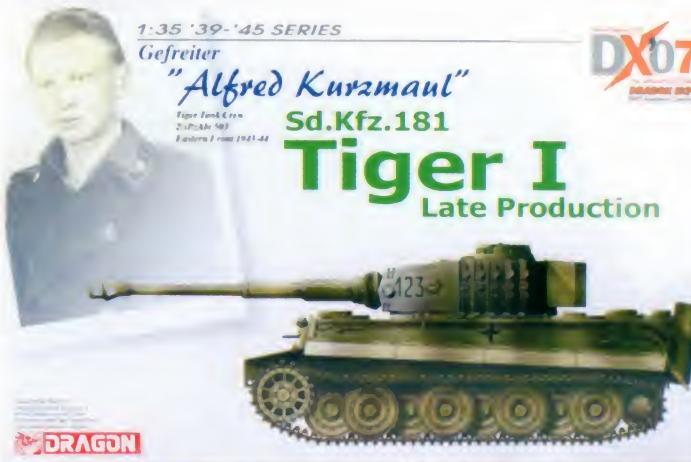


This Late Panther G was captured by the Soviets and used by the 366th Guards Heavy Self Propelled Artillery Regiment, 47th Army, Lake Balaton, March 1945. It retains the original German camouflage but a Soviet radio aerial has been fitted to the top edge of the glacis plate, to the right of the gun barrel. The drive sprockets and outer road wheels are painted dark green. There is a dark green rectangle painted on either side of the turret with a centrally located red star, a smaller rectangle and star were also painted on the lower centre glacis plate.

© D. R. CROSBY 2006

This Panther has been base coated in olive green. This colour was authorised in the final months of the war to replace the standard dark yellow base colour. The tank was operated by the 11th Panzer Division in Bavaria 1945.

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Darren Thompson takes a look at Dragon's 'DX'07 Late Tiger I and the ton of extras included.

KURZMAUL'S TIGER

As many of you will know, it has become traditional for Dragon to release special limited edition versions of their kits to coincide with the various 'Dragon Expo' events around the world. Previously it has only been possible to purchase these kits at the actual events, but this time around, some of the 2007 Expo kits appear to be on general release, this Tiger I being amongst them.

The first difference that strikes you is the packaging, being more akin to the Cyber-Hobby releases, as it is in a predominantly white box, with a side profile, colour-plate style artwork and a period photograph of Gefrieter Alfred Kurzmaul, the subject of this special release.

From the age of 17, Alfred Kurzmaul received training as a gunner, loader and driver on the Pz. III and Pz. IV tanks, first serving Panzer-Regiment 25 with the 7. Pz. Div. at Erlangen, then as part of Panzer-Gruppe 3 in Russia. After special driver training on the new Tiger I with s.Pz.Abt.502, he was then assigned to s.Pz. Abt.503, with whom he stayed

until the end of the war. The Tiger I in which he served, no 123, being the version portrayed in this kit.

As it was based on Dragon's previous releases of the Tiger I, particularly the Late 3-in-1 kit, many of the sprues are tweaked versions of these, with the addition of a new sprue, containing the details to make a January 1944 vehicle, as issued to schwere PanzerAbteilung 503.

The new turret roof depicts the 25mm, two-part welded version, with the raised lip for the loader's hatch opening and the centrally placed ventilator, above the gun breech. Both cast and welded versions of the loader's hatch are supplied, with excellent details inside and out and two versions of the ventilator cap too, either with flush screws or a handle. The spare track links are worth mentioning, as they have good crisp end detail and separate hollow guide horns, although you'll have to replicate the track pins somehow, or drill out the open ends. The kit contains a generous amount of unused parts for the spares box, for example, the correct mantlet is supplied, with the twin holes for the

binocular sight, but so are four other versions, so be sure to get the right one!

A new rear hull plate is included, with a choice of engine-starter plates, either horizontally, or vertically mounted and the exhaust shroud mounting points moulded in place, to give the often overlooked gap, between the shrouds and the rear plate. The lower hull tub has also been re-worked, to portray the correct towing shackle points and recessed hatches on the underside.

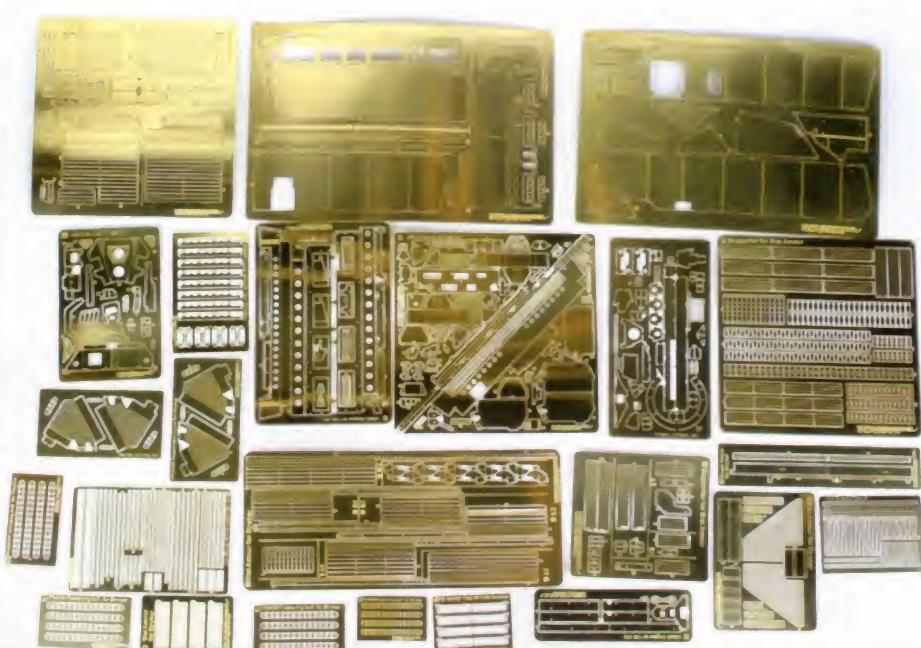
The wheel sprues provide two types of outer steel roadwheels, with different inner bolt patterns, so again, check that you use the correct ones and both 600mm and the larger 700mm idlers are included, the latter being correct for this version. The tracks this time are one-piece 'DS' vinyl, which are really very good, including the same trackpin end detail and open guide horns, as mentioned earlier on the styrene spares.

The markings for Alfred Kurzmaul's Tiger are nicely printed by Cartograf, consisting simply of the black turret number '123' and black and white Balkancruz. The vehicle's colour scheme is accurately depicted on the box art, being a red-brown overspray on a dark yellow base. The Tiger would have had zimmerit however, which is not depicted in the kit, so you'll have to use your preferred method of application.

All in all, another top quality kit from Dragon, all the relevant details for the subject kit are in the box, as well as many other spare parts besides, for those who wish to depict a different vehicle.

Highly recommended. ■





STRIKING STRYKER

After our initial look at this amazing etched brass set for the Stryker back in last month's Incoming, Ian McGonagle now offers a more in depth look.

The Chinese manufacturer Voyager Models have been very busy over the last six months or so, keeping pace with the release of the Trumpeter Stryker and then the AFV Club Stryker. Voyager have, with the release of this upgrade, just about covered every inch and possibility of detail on the Stryker from both manufacturer's. Focusing on every item from the tyres to the weapons platform and everything in between. So what's in the plain brown box with the black and orange wrap?

Weighing in at 400g you soon get the feeling that this is etched brass on a grand scale. With thirty sheets of gleaming brass packed with care into five clear bags, a small bag of wire rope with a section of plastic rod within the box you are in no ways left feeling short changed. The instructions alone account for nineteen pages, all are clearly printed A4 text and pictures showing precise

instructions of how the mass of brass should be used.

Construction of the upgrade begins with the lower hull and the mass of armour attachment bolts with assorted single and double eyelets is mind blowing. The detail of the suspension cover grilles is high but if heavy weathering is your thing then it will be the first to get lost. The steering rods of the front axles get a small adjustment with the addition of brass. The stowage bins between the second and third axles are replaced even down to the workable hinge. The wheel inner rim is the last thing to be upgraded on the lower hull, this is worth it even if you use the Voyager Wheel Set PEA094.

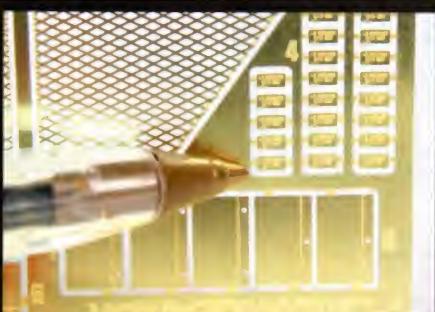
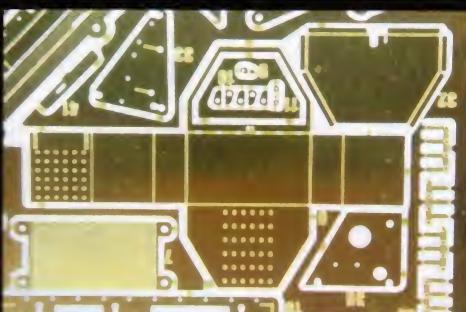
Attention swings to the upper hull now with the assembly of the smaller items that will be added later in the build such as the commander cupola, pioneer tool rack, wire cutters and the winch base, all mini tasks in themselves. The addition of the Space Armour

features next, this will transform the kit from a plastic model to a die cast vehicle, the weight is phenomenal. My set did suffer from a small amount of warping but this will be put right by annealing the brass before use. Once the spaced armour is in place, assembly moves to the stowage racks and again the attention to detail is second to none. The tubular frame needs to be scratch-built and adding a bank of brass sheet and the small detail is a matter of course. Lines of cleats need to be added to the upper and lower sides of the racks. Such is the detail, that the latch mechanisms are supplied for the hatches, a great shame because unless you scratch-build the interior you will have a highly detailed vehicle with empty voids if the hatch is displayed in the open position.

If by now you are still of sound mind and body surely the stiffest test awaits you, the Slat Armour. You begin by making all the

attachments that will secure the armour away from the vehicle and true to form the detail is breath taking. When this is done you can then set about the slat panels that corral the Stryker. Each horizontal slat is added separately, need I say more? When you have built all the sub assemblies you then surround the Stryker in its mask of brass and going by the colour photograph on the box it looks stunning, in fact don't even paint the model.

Voyager have not managed to produce the ultimate upgrade for the Stryker, due to the possible need of the addition of the wheel set at the very least. They have however produced an upgrade that does what it says, in fact it goes further than that, you only have to look at the 4 x 3 inch colour photograph on the box lid to see that you will be burying the model in detail. Highly recommended for a future Stryker project with only half a point dropped because of the omission of the wheel set. ■





Figures - A round-up of the latest figure sets on release...



MASTER BOX LTD

1:35 GERMAN SIGNAL PERSONNEL STALINGRAD, SUMMER 1942

ITEM NO. MB3540

This German Signal Team have all the potential to make an ideal centre piece to an action packed eastern front diorama. Included in the box are five well animated Wehrmacht soldiers in the process of trying to lay a communications cable whilst under enemy fire. Three are posed as if running for their lives to get into covering positions to be able to protect the cable layers. The remaining pair which make up the actual cable layers, not a task to relish, just watch the film 'Enemy at the Gates' starring Jude Law to see how unenviably costly this task was.

The figures are all fairly well detailed with decent heads, the parts do suffer quite badly from heavy mould lines, which will require time and care to remove properly. As with the Russian Tankers from Master Box, I found that the parts not being numbered on the sprues to be somewhat annoying as I have the memory span of a gold fish and I had to keep double checking the instructions before finally removing the part!

The weapons and their personal equipment are pretty well rendered but are not a scratch on Dragon's latest Gen 2 sets. For those wanting to make the best possible figures from what Master Box have supplied, I would recommend some replacement resin heads from the likes of Hornet or Cromwell Models and use some of the personal equipment left over from the tons included in all of the German figure sets from Dragon. Overall a decent set of figures which are simple to assemble, offer well animated poses and bring something a little different for anyone interested in modelling the brutal battles of the Eastern Front.

Distributed in the UK by www.creativemodels.co.uk

8/10 - The Editor



MASTER BOX LTD

1:35 RUSSIAN TANKMEN

ITEM NO. MB3535

This set consists of four Russian tank crewmen going about their daily chores whilst at rest. As with the German signal troops, the detail isn't up to Dragon standard and suffer from heavy mould seams around the parts but with some careful clean-up will still build into a very nice set. Perfect for adding some life and scale to any of the many Russian armour kits available today. Most importantly the poses look natural and relaxed and the parts fit together well. The number of parts has been kept to a minimum making this set ideal for the less experienced modeller.

Again as per the German set, I would have preferred that the parts contain corresponding numbers on the sprues, but on the up side they do offer a clear set of colour assembly and painting instructions on the back of the box.

Another interesting and innovative set of figures from Master Box, which I'm sure will be greatly received by anyone interested in modelling WWII Soviet subjects. Distributed in the UK by www.creativemodels.co.uk

8/10 - The Editor





CMK

1:35 US MP MOUNTED AND IRAQI CIVILIAN ITEM NO. F35198

Although this set is labelled as being from Iraq, I think that the use of a mounted US MP/Special Forces operative and the style of clothing worn by the civilian is more reminiscent of Afghanistan than Iraq. That aside, the figures and horse have been expertly sculpted and well cast offering very crisp and clean detail. The horse being particularly well rendered, and a subject which is no easy feat to sculpt and get right. The weapons included are finely detailed, delicate but a bit on the skinny side, which means careful cleaning and handling will be essential. The MP's weapon looks to be a bit of an unusual amalgamation of parts as it has the extending stock from an M4 but the long barrel and forward hand-grip of a standard M16A2.

It also bizarrely seems to be fitted with an original 20 round magazine from the Vietnam war era? However sourcing a decent replacement rifle will be easy enough from any of the many modern US vehicles or plastic figure sets on the market. Overall a nice set which will make for a great vignette or centre piece to a much bigger diorama.

Available from www.cmkkits.com

8.5/10 - The Editor



WEE FRIENDS

120MM MODERN BRITISH SOLDIER

ITEM NO. 12001

The first in the 120mm Wee Friends range begins to address the lack of modern British soldier figures out there. The figure is shown standing, sleeves rolled up with SA80 at the ready. The sculptor, Pete Morton, has also made two heads, one with helmet and goggles and the other wearing a beret which sports the Para badge. All his pouches and pockets look suitably filled with kit and the webbing is nicely textured at the back. The only thing possibly missing from the figure is his Bergen but even without it this is a great figure and will prove popular with figure painters. Now if we can have some modern British figures in 1:35 then we can begin to populate all the vehicles that are currently available, are you reading this figure manufacturers? Highly recommended.

available from www.friendshipmodels.com

9/10 - Graeme Carruthers



TAMIYA

1:35 FRENCH INFANTRY SET

ITEM NO. 288

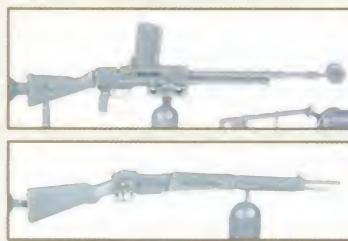
It's good to see Tamiya have decided to produce some WWII French infantry figures to compliment their recent Char B1 bis tank and Renault UE armoured carrier. This set consists of five infantrymen and an officer. The officer, one of the riflemen and the machine gunner in the prone position are all wearing the M1938 pattern overcoat, whilst the remainder are all in the standard M1920/35 field uniform, complete with their First World War style gaiters.

The figures have that typical Tamiya look with detail that is starting to lag behind quite noticeably from the likes of Dragon and MiniArt. The upside is they are extremely well engineered and are very easy to assemble.

Along with the sprue containing the figure parts are two small sprues containing all of the ancillary equipment such as the Mle1924/29 machine guns and the MAS M1936 rifles along with their webbing equipment, helmets and even a couple of those typically French Kepi caps. All these parts are very nicely detailed and I personally think these will look very good with some careful painting and some better detailed replacement resin heads.

Available from all good model shops.

7.5/10 - The Editor





Book Reviews

1 elements
...in combat!

H2Whoa!



ELEMENTS ...IN COMBAT1

H2WHAO!

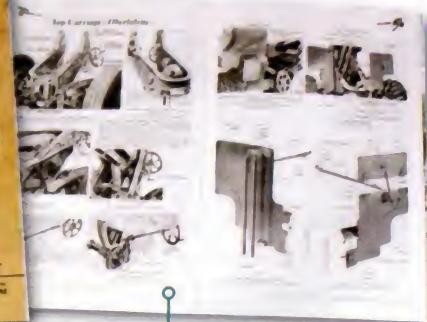
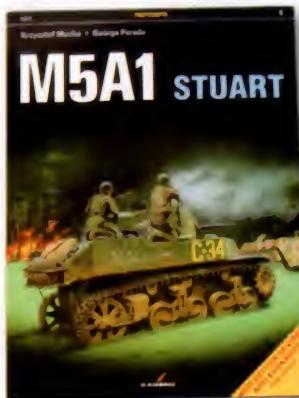
UNDER WATER MODELLING • EXTREME MODELLING PUBLICATIONS • 96 PAGE S/B

At a recent model show, Wendy from the Aviation Book Centre was kind enough to let me have a copy of the Elements No.1 book on water based dioramas which contains some very impressive dioramas including Rhodes Williams' stunning diorama which contained the Land Wasser Schlepper which we previously featured in MMI. In this book you can see it in its full glory with circling shark, sunken ship and divers.

Also contained within the pages are some varied dioramas including a P38 Lightning being ferried to shore astride a couple of DUKWs, a very nice late Panther and a KV-2 bogged down to its track guards. In total there are eight articles featured, all of which offer lots of tips and explanations regarding the techniques used by some of Spain's most talented modellers and our very own state side living 'ex pat' Rhodes Williams. This book is not only a colourful gallery showing some fine works but is also a very useful modelling reference for anyone wanting to try something a little more adventurous with their next model or diorama. Highly recommended.

Available from www.aviationbookcentre.com

The Editor



M5A1 STUART

KRZYSZTOF MUCHA GEORGE PARADA • KAGERO PUBLISHING
PHOTOSNIPER 3 • ISBN 978-83-60445-81-5 • 68 PAGE S/B

Kagero's 'Photosniper' really is a one stop reference source for the M5A1 and to a lesser extent the earlier M5. The book starts with an eight page introduction and history, which includes a selection of war time photos featuring Stuarts in use with Polish forces. Next we are treated to 40 pages of pin sharp exterior detail photos of a beautifully restored M5A1, of which eight pages are in full colour, I also liked the fact that most pages only featured between two and four photos per page, this means the photos are kept nice and large making it easy to gain the most valuable reference from each image.

Following the photos, we are then treated to seven pages of line drawings and 1:35 scale plans detailing the differences between the M5 and both the early and late M5A1's. Following the drawings we have a further 7 pages of large colour photos of the interior. Lastly we have 10 very nicely painted colour side profiles to round off this excellent 'one stop' reference source ideal for anyone interested in the detailing of any of the current kits available or anyone interested in this speedster.

As a final bonus the book also comes with a small decal sheet containing a selection of markings for 1:35, 1:48 and 1:72 models.

Thoroughly recommended.

Available from direct from www.kagero.pl or from www.bookworldws.com in the UK.

The Editor



U.S. WWII 155MM HOWITZERS

M1 & M1917/M1918, 4.5IN GUN M1
AUTHOR M FRANZ
TANKOGRAD PUBLISHING

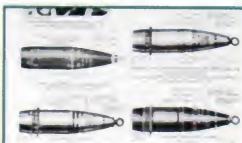
I have to say that Tankograd is a firm favourite of mine, the no-nonsense presentation of black and white technical pictures and diagrams helps present the modeller with a clear view of the chosen subject. The addition of 'in theatre' photographs helps bring the diagrams to life giving scale and presence, also the text in German and English gives an explanation of how and why things are.

Michael explains within the text the problems the U.S Army faced at the beginning of WWII as a consequence of the late entry into WWI. The lack of medium and heavy artillery of their own and only being able to call on the old French guns to convert is shown within the book. The soft backed book contains 48 pages of concentrated facts showing the guns from the early 1930s right through to the Korean War with accompanying pictures of the differing ammunition types fired by the guns, even down to markings and description.

As usual Tankograd has published a first class book on an overlooked subject.

Available from www.bookworldws.com

Ian McGonagle





F.A.Q. PIGMENTS NIGHT VISION CREATIONS

The first in a series of DVD's by Mig Productions showing in a very informative yet light hearted way, how to work with and get the most from their range of weathering pigments. Adam Wilder takes us through their use, from dust and mud to rust, smoke and tracks including polished metal finished. The DVD format is by far the best medium for demonstrating the use of products and techniques as you get to see the effect appearing in real time.

Also included inside the sleeve of the case is a bonus guide which can be left on the work bench as an aid-memoir for your next project.

As I know Adam, it was personally really funny to watch the out takes at the end of the main feature.

I have watched quite a few of these 'how to' DVD's of late and I think this is undoubtedly the best I have seen, not too long, informative, professionally produced and definitely one I would recommend for wanting to get the most out of Mig's range of weathering pigments and for knowing how to use them properly.

Available from www.migproductions.com and www.historex-agents.com

The Editor

SHERMAN FIREFLY

AUTHOR DAVID FLETCHER ILLUSTRATED BY TONY BRYAN
OSPREY PUBLISHING
ISBN 978-1-84603-277-6

The prolific trio are at it again, David Fletcher by compiling his wealth of knowledge on Allied armour and committing it to text, Tony Bryan by showing us his skill in producing high quality illustrations and Osprey in choosing to publish a book in a subject that is a sure fire winner.

The New Vanguard book 141 is presented in the standard soft backed format, 48 pages of text, photographs, illustrations and line drawings. David describes the need for an up-gunned Sherman on the battlefield, how it came about and the men who pushed it through the dogged opposition, he then describes the Allies use of the 17 pounder in Theatre. Tony adds his illustrations to show the Firefly in its differing guises with the regiments it served with. One of the many illustrations that stands out for me is the Polish Firefly of the 2nd Polish Armoured Brigade in Italy crossing a Churchill ARK, the half page illustration graphically represents the presence of this machine.

In short this book would appeal to not only the Shermanaholics but also to the modeller and military bookworm, only the restrictions of the format prevent this from being a real prize in your collection.

Available from all good book shops.

Ian McGonagle

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Darren Thompson checks out Dragon's second Expo release, Georg Bose's early StuG.III G

BOSE SELECTA!

This is another of Dragon's special Expo kits that has made it to general release, based on their previously released Early StuG. III G 'Smart Kit'. Again packaged in a predominantly white box, with a side-profile colour-plate and a period photograph of Leutnant Georg Bose as the box art.

Georg Bose became a member of Sturmartillerie 1/recon 'Grossdeutschland' and fought with them on the Eastern Front, later becoming the leader of StuG-Abt. 177 and participating in operation 'Zitadelle'. During fighting against the Russian Army, he was awarded the Knight's Cross. He and his division went on a reconnaissance mission to try and free the division lying behind them, under enemy fire. After destroying one enemy tank, He drove his remaining StuG III down the main street, hoping the enemy tanks would fire upon them, thus giving away their.

positions, allowing them to be attacked later from a protected position. During that morning, Georg Bose destroyed 11 Russian tanks and was later praised by General-Marschall Model for saving the division.

Unlike Dragon's earlier Alfred Kurzmaul Tiger I, which contained a new sprue, plus several other new and improved parts over the standard version, this StuG III differs much less from its earlier Smart Kit origins.

The lower hull is built in the traditional manner, with separate torsion bars and suspension arms allowing moveable suspension. Roadwheels and drive sprockets are beautifully reproduced, as are the idlers, which have separate brass rings to best portray the inner rim. Exhaust outlets are well detailed, including a new etched brass grille, one of the few improvements over the earlier kit.

Side trackguards are mini sub-assemblies, onto which all the tow

cables and tools are added, whilst there are etched supports for the trackguard brackets themselves, the tools all have moulded plastic clasps, one of the simplifications of the smart kits.

The upper superstructure is again identical to the earlier kit, with the exception of the appliqué armour on the front vertical plates. All hatches are separate and detailed inside and out, with a positionable commander's cupola, which utilises clear plastic to better reproduce the periscopes. A simple interior is included with radio racks on the inner sponsons, and a nicely detailed gun mount assembly, breech and fighting compartment floor.

Tracks are the individual, glue together, link type, with open guide horns. These are thoughtfully moulded in two slightly different shades of grey, to avoid mixing up the left and right-hand links.

Finally, the thing that really sets this kit apart and gives it its identity is the decals. As usual printed by Cartograf, they consist of an all black number '104', which is offered as an alternative to the Balkancruz for the superstructure sides, so you'll need to check your references as to which one was applied. There is also the phrase 'Oblt. Leiben' to apply to the gun barrel. Colour scheme is worn whitewash over dark yellow.

Another superb kit from Dragon which, although it differs little from the original, is a welcome addition, purely for the historical content it brings with it. Hopefully there is more of this to come. Highly Recommended. ■





Letters

RECOMMENDED READING

THE LANDSHIPS OF LINCOLN - SECOND EDITION

RICHARD PULLEN
TUCANN BOOKS
192 PAGES S/B

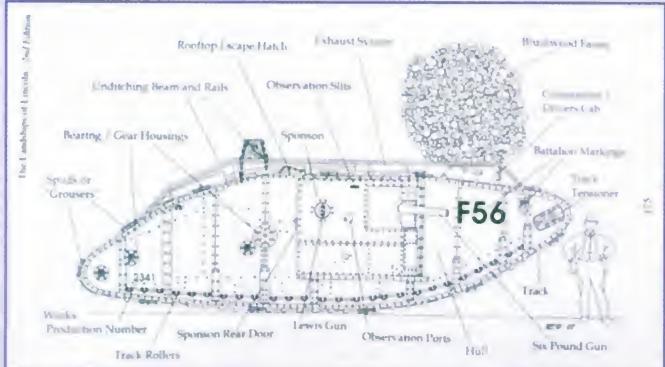
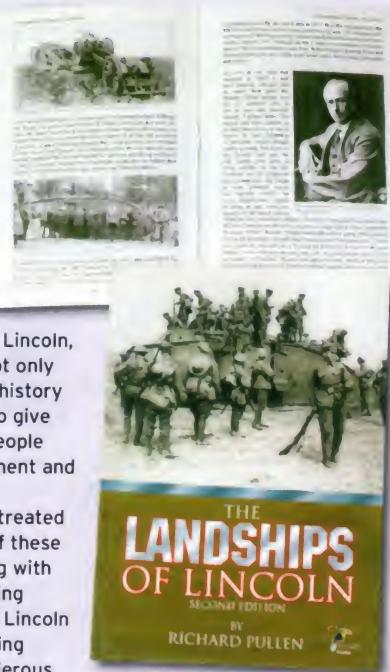
For this months recommended reading, I have a book that I actually have to read instead of being able to get away with just looking at the pictures! This fascinating book retraces the history of the first tanks and their ties with the city of Lincoln, their birth place. The book not only covers the development and history of the actual vehicles but also give a fascinating insight to the people behind their design, development and introduction into battle.

Throughout the book we are treated to some fascinating photos of these early machines in battle along with some great shots of them being driven through the streets of Lincoln with crowds of spectators lining the pavements as these ponderous beasts rumble by.

Lastly at the rear of the book we have some very nice line drawings of the various marks of these early machines, unfortunately the scale is depicted by the size of the page.

A great read that has really kindled my interest in these pioneering machines. Thoroughly recommended.

Available from the Aviation Book Centre.



GLUE FUMES

I had been running an after school model club at my son's school, Loseley Fields Primary, when a member of staff commented on the smell of the poly cement. This led to a risk assessment being done and I had to supply the relevant information. Unfortunately the glue contains chemicals that are banned by the local education authority. This was nearly the end of the model club as I did not know of a safe alternative, definitely not cyano. After many phone calls and a lot of searching on the internet I found that Testors make a non-toxic poly cement. This glue is imported into the UK by Creative Models, and I got a sample, via SBX Models, to try. It works fine and the children like the fruity smell! It could even stop wives/partners/parents from complaining about the fumes in the house! I hope this information helps other readers.

Thanks
Andy Pink

INTERIOR DECORATING

First of all, great magazine - I've had it since issue 1 and I think it has filled a gap in the market that was missing for a long time! Secondly can you help please? Now I have been modelling for some thirty five years on and off and have quite a few military reference books etc. However now that I am constructing the Dragon Heushrecke, (which probably nobody knows anything about?) I find myself stuck in a dilemma as to what colour to paint the interior? Gut feeling says German yellow for the turret as it would have been "exposed" and therefore required to be the same colour as the rest of tank (in line with all German tank colour schemes) but as for the rest of the main interior do you reckon on 'off-white' or German yellow. I could think of reasons to go either way. Interesting one eh?

Regards
Mark Windley

Ed says: I'm glad you like the mag. It's interesting to see that you think we have filled a gap in the market, whereas Stevie Gibson thinks the complete opposite!?

As for your dilemma, the instructions from the OKW stated that if any interior surfaces could be viewed from outside they should be in the base camouflage colour as the exterior otherwise interiors should be in Ivanbaun Ivory (off white) and flooring in a dark grey or red oxide primer colour. The new Vanguard book on the Tiger I has a nice colour cut-away drawing showing exactly this. However the Heushrecke is a bit of an oddity as most of the interior is invisible as per a normal tank until the turret/gun assembly is dismantled for use, exposing areas not normally seen. Yes you are right, this one is an interesting one. If anyone has a definitive answer or evidence to show how it was painted we would love to hear it.

IT'S ALL IN THE TITLE

Yup, it's that time again. Has it really been two years since the mag started? I have had a subscription for two years, but will not be doing so again. Why? Planes! I know that there has been a lot said about including planes in the magazine, but when the mag first came out (and for a long time after) it was exclusively tanks, AFV's and figures, and I had been waiting for a VERY long time for someone with the foresight to bring out a magazine to appeal exclusively to armour modellers. I know some people had written to say that they applauded you for including planes, but I do not. For every plane/helicopter inclusion, that means that a tank or AFV will not be featured. If I wanted to read about planes, I

would have taken out a subscription to MILITARY IN SCALE instead. I DO buy said magazine if there

is anything worthwhile, and from now on, will do the same to MODEL MILITARY INTERNATIONAL.

This may seem extreme to not renew my subscription, but feel very strongly about this, and is the only way that I can pass on my



WRITE TO:

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 Tel: 01525 222573 Fax: 01525 222574 Email: editor@modelmilitary.com
 The views expressed are not necessarily those of the editor or publisher. Letters may be edited for publication.

disappointment in the way that I feel MY magazine is going.

Yours faithfully,
Stevie Gibson

Ed says: I'm sorry that you feel so strongly about the odd inclusion of something with wings, be it fixed or rotary, but I did state in the very first issue we would include battlefield helicopters and certain waterborne craft, that is why the title is *Model Military International* and not *Tank Monthly*.

To answer your question why planes? Well we have only reviewed ONE plane and three helicopters in 26 issues! That particular plane was featured, as I have already explained in a previous issue, because it was flown by the ARMY and has been released in 1:35 which is undoubtedly the most popular armour scale, so can easily be tied into a diorama. Lastly the painting and weathering techniques described by the author are applicable to armour modelling as much as they are for aircraft.

Which in my eyes makes my decision to feature it in MY magazine totally justifiable.

PAPER PANZERS

I was interested to read the review of the new Dragon Heuschrecke by Graeme Carruthers in the latest issue of the magazine. I can, just, recall seeing a model of the same vehicle in the window of my local model shop in Camberley, many many years ago. I remember thinking it must be a 'flight of fancy' by someone who had built it from parts of several kits, but no, it was a commercially produced item. I am not sure if it was by Midori, Bandai or possibly even Nichimo, but it was there.

It seemed so out of place then, but now, with Luftwaffe '46 and the 'Paper Panzers', becoming so commonplace, this peculiar machine is not such an oddity.

Mike Prorok

Ed says: You are right so many of the models we could dream about not long ago have not only been produced by the resin manufacturers but now are available as plastic kits and more often than not very good value for money. I think the biggest problem now is having time to build them all.

PATCH ME UP

Firstly I wanted to say many thanks for a great and extremely helpful magazine, I'm returning to this hobby of ours after a long break and have started building mainly British armour. My question to you is, do you have any idea

where I might be able to purchase British WW2 1:35 scale uniform decals from? I have tried the normal model dealers but still no luck. Any ideas you may have will be greatly received.

Shaun Stratton

Ed says: Hi Shaun, first of all welcome back to the hobby and as for your request for help locating WWII British uniform insignia, your best bet would be *Archer Fine Transfers*. They offer a range of 1:35 dry-rub style transfers for just about every subject, including WWII British divisional and rank patches. Archer's entire product range can be viewed and ordered online from www.transfers.com, where they include patches for the Guards Armoured Division, 7th, 11th and 79th Armoured Divisions along with the 3rd Division and a set full of rank insignia. Archer products are also stocked in the UK by www.historrex-agents.com down in Dover.

**MESSAGE FROM THE EDITOR****WHAT WE REVIEW**

I have just returned from attending a model show at the RAF Museum, Cosford and one of the questions I kept getting asked was why we do and don't review certain models and certain manufacturer's products? Well the answer is in two parts... First of all it depends on if we are actually sent the models to review in the first place and secondly how often new products are released. Dragon for instance are producing new kits at a phenomenal rate, where as other manufacturers have a much slower release schedule. Dragon and Tamiya for example have always been very quick at getting their latest releases out for review, which is great for us, as we work two issues in advance and this means the models aren't second hand news by the time the magazine hits the news stands. On the other hand with some manufacturers we have to wait until their UK distributors or importers have stock, and only then will we receive samples and to be perfectly honest some are much better at forwarding them than others. The bottom line is we can only review, what we actually get sent! To round off I would like to say a big thank you to all who have been gracious enough to supply us with their products and have helped make the MMI what it is today.

Spud

See you again on June 5th!

John 'Spud' Murphy

RANDOM REFERENCE!**EXTREME WEATHERING**

Inspired by regular contributor to the Missing-Lynx internet modelling forum, Andy Taylor and his superb T55 models, I thought I would dig out a couple of photos from one of my many deployments to Afghanistan during 2002-2003, particularly to the now famous Kabul tank graveyard. Of interest here, (apart from one of our cuddly framed pilots, who will have to remain nameless because RAF tradition states - if have your picture printed in any publication it will cost you a lot of beer) is the rather battered looking T54.

Seriously of interest are the turret numbers which have been applied directly over the previous ones, the mantlet minus its dust cover (perfect for the Mig Productions /55 mantlet reviewed back in issue??) Also of interest is the distinctive faded yellow/green tone of the camouflage and how the paint has rubbed (glassis plate and top of the mantlet) and flaked off (inside of the Commander's hatch around the locking handle) depending on the type of wear and tear these areas receive constantly. I hope these prove inspirational to someone interested in extreme weathering?





The size of the Geschützwagen hull is evident here when placed next to the hull of a Tiger I.



GARGANTUAN GRILLE

Darren Thompson takes a look in the box of Trumpeter's massive Geschützwagen mounting the equally enormous 17cm field gun.

It's no secret that Trumpeter love their large artillery kits having previously released the Karl Morser, Leopold Railway Gun and various tracked and towed howitzers, but this one came as a bit of a surprise.

During the latter stages of WWII, Germany was developing various enormous and ungainly weapons, which never reached full development and this latest Trumpeter kit is one such weapon.

The Geschützwagen Tiger für 17cm Kanone 72 (sf), or 'Grille 17' mounted the huge 17cm cannon on its original turntable base, within a new tracked carriage, based heavily on the running gear of the Tiger II. The cannon could either be fired from the carriage, or dropped onto a detachable baseplate, that was carried on the rear of the vehicle, allowing full 360 degree traverse, but due to delays in the delivery of the Tiger II components and heavy allied bombing of the manufacturing facilities, the vehicle was never completed. The chassis and gun were found by the Allies at the end of the war, partially assembled.

The first thing that you'll notice when opening the box is the length of the hull, it's approximately 50% longer than the Tiger II giving it a long, narrow appearance. The running gear is good, with separate suspension arms and some nice surface detail on the road wheels, all of which feature separate hubs. The tracks are one-piece rubber band style, which are reasonable, but not up to

the standard of Trumpeter's other kits, having little definition and a few moulding scars to deal with. Within the hull it gets better, a basic interior is included, featuring a driver compartment with gearbox, transmission housing and a simple radio set, which should look more than adequate when viewed through the hatches. Behind this is also a full engine compartment, with radiators, cooling system and a very nice rendition of the Maybach HL 230 engine, made up of around seventy individual parts.

The fighting compartment is fairly sparse, with nicely moulded floor panels and sidewalls, featuring the separate seating arrangements for the eight gun crew. The large drop-down sides have some large interior sink marks, which will have to be dealt with, as does the inside of the front panel.

The large 17cm cannon is a fairly substantial kit in its own right, with the option of mounting it within the vehicle or separately, just as the real thing was intended to do.

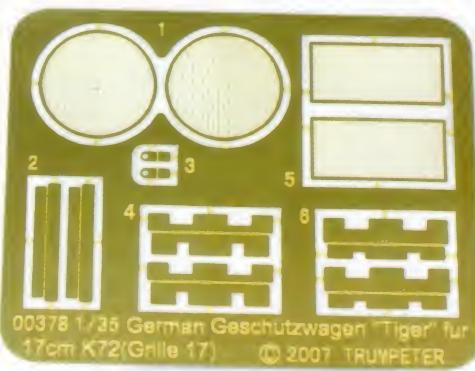
The gun carriage shows some very fine rivet detail, both inside and out, although the insides again feature some sink marks. The barrel is a four-part affair, there are front and rear sections, both consisting of two halves each, so some careful alignment will be necessary here. The working breech is well reproduced, with all sides moulded separately for good definition, as is the one-piece muzzle brake, moulded completely hollow, although some of the holes may need opening with a fine drill.

Colour painting instructions are given for a three-tone 'ambush' scheme, fine if you enjoy your '1946' models, but as none of these were finished I think a little inappropriate. The pictures of the hull found at the end of the war show a single overall colour, both inside and out, but it's hard to say just what that colour is. A good excuse to get out the ever popular red primer perhaps...

A small decal sheet, consisting of two large balkankruz is included, as is a small etched fret for the engine grilles, and some radiator fittings, as well as two springs for the gun's working recoil action.

Whilst this kit is not at the top of many people's wishlists, it's been very nicely done by Trumpeter and I for one, was a lot more impressed with it than I expected to be.

With a little work on the sink marks and maybe a new set of Tiger II tracks, this will build into a handsome and impressive model. ■





References - The Sturmmörserwagen - AKA Sturmtiger



The massive size of the Sturmmörserwagen made it unmistakable. Despite Hitler's visions of companies having 14 of these vehicles assigned to each division, and expending a combined 300 rounds per month of ammunition, only 18 vehicles in total were ultimately assembled. The MG34 has already been removed from its ball mount on this captured example. Notice that the front of the hull has been reinforced with an additional 50 mm thick armour plate bolted on. This was not present on all vehicles. Photo courtesy of the National Archives and Records Administration.

MONSTER MORTAR

David Doyle offers us some interesting information on the few war time photos that exist of the ultra-rare Sturmmörserwagen otherwise known as the Sturmtiger.

Because of the problems that the Germans had encountered during the siege-like battle for Stalingrad, it was decided that they would develop a heavily armed and armoured vehicle capable of

leveling large structures with a single round. Even though work began on this project in mid-1943, the first production vehicle was not completed until August 1944. Whilst originally envisioned to be built on the new Tiger I chassis,

the critical need for Tigers led to the decision to build the Sturmmörserwagen on rebuilt battle damaged chassis. Delays such as this resulted in only 18 of the massive machines being built in total by Alkett in Berlin.

The main armament of the Sturmmörserwagen was a Raketenwerfer 61. This stubby weapon fired a 38cm rocket. Additionally, two 7.92mm machine guns were carried, an MG34 and a MG42. ■



▲ This Sturmmörser, belonging to Sturmmörser Kompanie 1000 was captured and evacuated by US troops in February 1944. Notice the massive size of the Tiger-based vehicle compared to the relatively diminutive Sherman-based recovery vehicle with Commonwealth crew passing by.

Photo courtesy of the National Archives and Records Administration.

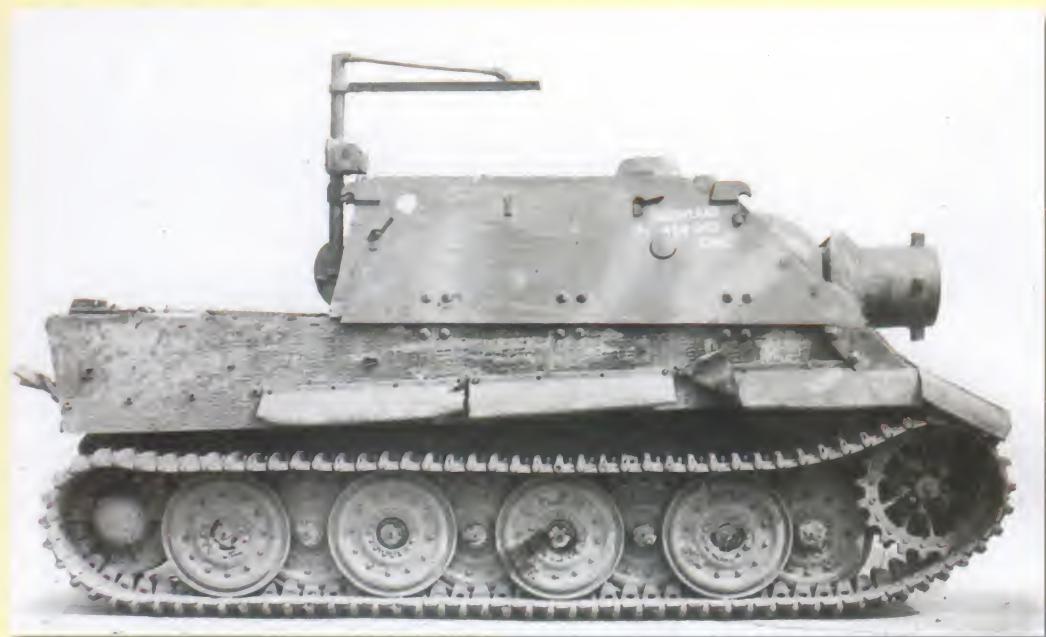
▼ The heads of the massive bolts that secure the superstructure to the chassis are visible here, as are the welds joining the interlocking upper armour sections.

Photo courtesy of the Ordnance Museum, Aberdeen Proving Ground.





References - The Sturmmörserwagen - AKA Sturmtiger



▲ After its retrieval by the Americans, the Sturmmörser was sent to England for study at the School of Tank Technology. From there it crossed the Atlantic for further study at Aberdeen Proving Ground. The crane just behind the superstructure was used to hoist the huge projectiles and place them inside the vehicle.
Photo courtesy of the Patton Museum, Fort Knox, Ky.



▲ Rebuilt Tiger I chassis were used as a basis for these vehicles. While the chassis were updated with steel rimmed road wheels, etc., some variants were present among the Sturmmörser. Thus this Sturmmörser has zimmerit on its lower hull, while the other vehicle shown does not.
Photo courtesy of the Patton Museum, Fort Knox, Ky.

▲ The holes surrounding the gun tube are to expel the gases generated by the launching of the rocket. The unusual rocket and launcher were based on an anti-submarine weapon developed by the Kriegsmarine. The weapon is shown here at zero elevation.
Photo courtesy of the Patton Museum, Fort Knox, Ky.

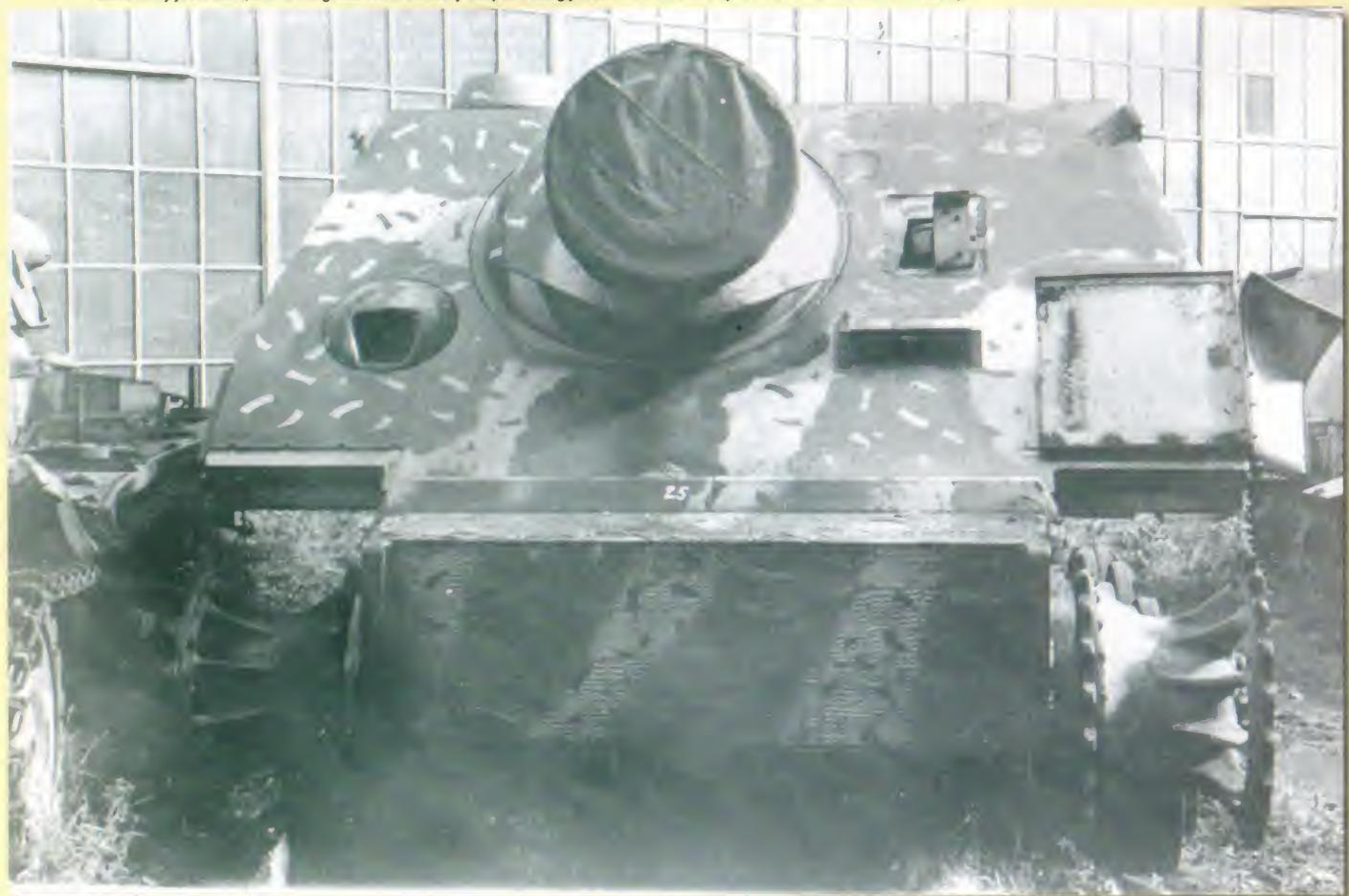


▲ This upper view allows us to see the loading hatch, which is partially open here. Also notice the lugs for mounting a counterweight near the muzzle. Photo courtesy of Armin Sohns.



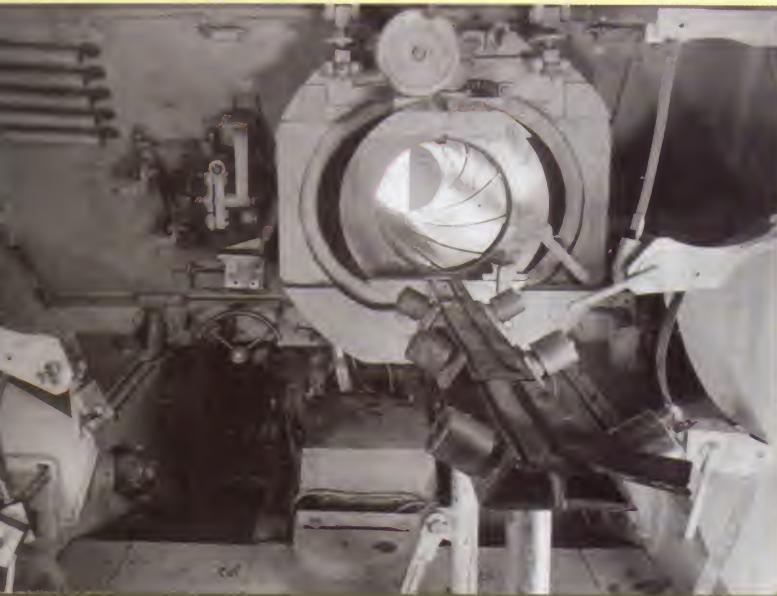
▲ This rear view clearly shows the mounting for the ammunition davit, as well as three holes shot in the left rear of the vehicle prior to its capture. The chassis number of this vehicle, 250327, reveals that the chassis was originally produced in June of 1943 as a tank. Photo courtesy of the Patton Museum, Fort Knox, Ky.

▼ Viewed head-on, the heavy armoured box and formidable bore of the weapon made the Sturmmörser very much the intimidating looking weapon. This photo was snapped shortly after WWII as the vehicle was in outdoor storage at Aberdeen, Maryland. The vehicle was outdoors for most of its almost forty years there, before being returned to Germany and painstakingly restored. Photo courtesy of the Patton Museum, Fort Knox, Ky.





References - The Sturmmörserwagen - AKA Sturmtiger



▲ In this view of the interior of the fighting compartment, we can see not only the loading tray and weapon rifling, but also, the driver's controls, albeit faintly. As the vehicle was based upon rebuilt Tiger I chassis, it had the same automotive limitations as the parent vehicle.

Photo courtesy of the Patton Museum, Fort Knox, Ky.



▲ The shells, which weighed 760 pounds each, could not be handled without mechanical assistance. Here a Sturmmörser crewman attaches the hoist cable to round, in preparation for stowing it on the vehicle.

Photo courtesy of the Patton Museum, Fort Knox, Ky.



▲ Two crewmen steady a shell as it is being hoisted into place. The huge size of the shells severely limited the ammunition capacity of the vehicle. The theoretical maximum was 14 rounds, which included one round each in the tube and on the loading tray.

Photo courtesy of the Patton Museum, Fort Knox, Ky.



▲ Here the weapon has been raised to its maximum elevation. On the right of this photo we see the periscopic visor of the driver, and above it the port for the PaK ZF3 gun sight. On the left of the photo is visible the ball-mounted machine gun.

Photo courtesy of the Patton Museum, Fort Knox, Ky.



REVELL

1:35 SPZ2 LUCHS ITEM NO. 03036

Revell have re-issued their SpPz2 Luchs which first appeared some 10 years ago. The kit is the same but this time packaged in an end opening box with new art work. The only differences I can see with this latest offering is the use of a slightly harder and more matt rubber for the tyres and a new decal sheet. The decal sheet has markings for four vehicles, one each based in Hessisch Lichenau 1985, Macedonia 1999, Kosovo 2000 and on exercise Royal Sword in 1990. The moulding is still crisp and well detailed and an accurate model of this impressive vehicle can be made from the kit. Highly recommended for all modern armour fans.

Available from all good model shops.
8.5/10 - Paul Egerton



CROMWELL MODELS

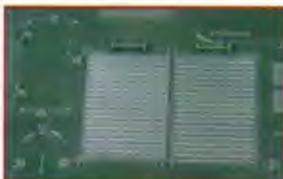
1:35 FERRET 2/3 D- RANGE

The Ferret began its long life in the British Army in the early fifties and was still serving during the first Gulf War in the early nineties. This versatile little vehicle, during its career was fitted with a number of turrets and weapon systems including Swingfire missiles. This 2/3 version is fitted with a small one man turret that was armed with either a .30cal Browning or 7.62mm LMG. The D-Range is Cromwell's new series of kits that are only available directly (hence the 'D') from Cromwell themselves and contains three different versions of the Ferret at the time of writing. The D-Range is also a series of kits that contain less parts in a fashion similar to their small scale 'Combat Ready' kits. Like the 'Combat Ready' kits less parts doesn't mean a reduction in quality, far from it! The main hull is cast in a single piece and has all the detail for the interior as well as the tiny exterior grab handles and most of the fittings already in place. The turret has its tiny tie-downs amazingly moulded in situ and is a fitting example of resin casting at its best. There is only a small amount of clean up required and it shouldn't take you too long to have this little vehicle at the painting stage.

However no painting instructions are provided but green and black or Gulf War sand are good options for the exterior with the interior a dull silver. There are also no decals so you will have to source these elsewhere. The instruction sheet is basic as the kit has few parts however there is no mention of the wheels and hubs, and the positioning of the few parts needed to complete the interior isn't clear.

This new D-Range is a great idea for the modeller and due to the smaller amount of parts the price is kept down as is the construction time. Due to their longevity the Ferret kits are a great first choice for the D-Range and offer the modeller lots of potential.

Highly recommended.
Available from www.Cromwellmodels.com
9.5/10 for the kit, 6/10 for the instructions
Graeme Carruthers



CROMWELL MODELS

COMBAT READY CENTURION MK 11 LR

New to the 'Combat Ready' range is the Centurion Mk 11, this version includes the main gun with the thermal sleeve and the long range fuel tank fitted to the rear. Like all kits in this range the main hull is cast as a single piece that displays some amazing detail in situ. Only a few of the smaller fittings such as the light guards and turret .30 cal require adding but you will need to check references as to where the pieces go as no instructions are included. Recommended.

Available from www.Cromwellmodels.com
8/10 - Graeme Carruthers



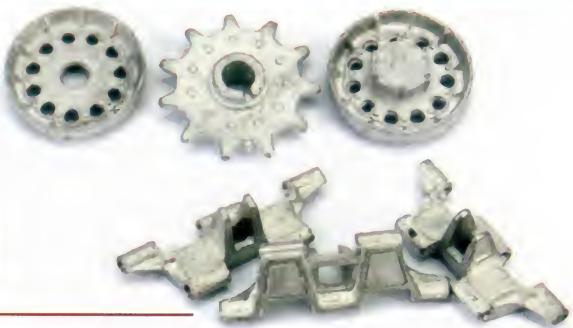
ARMORSCALE

1:35 TURNED ALUMINIUM BARREL SETS B35-082, B35-057 AND B35-003

Looking for a replacement barrel for an upcoming project, I stumbled upon the works of Armorscale. This Polish company specialises in resin upgrades, turned and milled aluminium and brass products. I got a couple of barrels for two Jagdpanzer IV variants (both the L/48 (B35-082) and the L/70 (B35-057) sets) and the set for the late Jagdpanther (B35-003) and I'm very impressed with them! Details on the Saukopf mantlets is absolutely stunning, with very fine setscrews, and small torch cut marks from the removed casting plug. All barrels come with rifling, and the Jagdpanther barrel has a multi-part muzzle brake in brass, which, once assembled, screws onto the end of the barrel, just like the real thing!

Available from www.armorscale.com
10/10 - Jan Peters





FRIULMODEL

1:35 M551 SHERIDAN WHITE METAL TRACKS ITEM NO. ATL-87

The latest model to get the Friulmodel white metal track treatment is the Academy M551 Sheridan. This is one of those models that will really benefit from a replacement set of tracks. The tracks supplied in the kit are the single piece vinyl type. The disadvantage of this type of track on a model such as the Sheridan, is that to achieve a natural track sag means having to glue the top run of the tracks to the road wheels, which can often look exactly that, glued down and unnatural.

The other problem I have found with the kit tracks is when they are fitted around the idlers, the ends of the links curled out, looking un-realistic. If you have either the Gulf War or Vietnam Sheridan on the 'to do' pile, then I would thoroughly recommend getting a set of these to replace the kit tracks.

Available from www.historex-agents.com

10/10 - The Editor

BLITZ LINE ARMOUR ACCESSORIES

1:72 M26 DRAGON WHEELS FOR ACADEMY KIT ITEM NO. B72 015

As the title on the package states these wheels are designed as a direct replacement for the wheels supplied in the Academy Dragon Wagon kit. What we get are 20 very nicely cast and detailed wheels and a small instruction sheet which marks out clearly which of the two styles of wheels go where. Having compared these replacement wheels with the kit wheels, two distinct advantages are highlighted. Firstly the central wheel hubs are better making the Academy parts look rather plain in comparison, secondly each of the Blitz wheels are cast as a single piece, making them quicker to install as there is now no need to have to glue each wheel half together before the time consuming task of cleaning up the joins can take place. Highly recommended.

Available from www.cmkkits.com

9/10 - The Editor



TANK WORKSHOP

1:35 US HALF TRACK WHEELS, DRAGON M2 ITEM NO. TWS 0058

When Dragon's M2 was released last year one of the first things that people noticed about the kit was the nicely weighted front tyres. This is a feature usually missing from aircraft kits and it is usually when the modeller turns to aftermarket companies for replacements. However it soon became apparent that the weighted tyres in the M2 kit were incorrect and wartime photos showed the tyres quite solid.

This inexpensive Tank Workshop set of resin wheels are designed as a straight replacement for the kit's weighted wheels and will take no extra time or trouble for you to fit. They are cleanly cast and will take only a few minutes to clean up the small casting plug. Recommended.

Available from www.Tankworkshop.com

8/10 - Graeme Carruthers



BLITZ LINE ARMOUR ACCESSORIES

1:72 GERMAN WWII FIRE EXTINGUISHERS

This neat little set contains 12 crisply detailed resin extinguishers, designed to replace the 'blob' like parts included in some of the injection plastic kits on the market. I have compared these to parts on various 1:72 kits and the they are a definite improvement, even when compare to the fire extinguishers included in Dragon's latest 'state of the art' toolings. Wholeheartedly recommended for anyone wanting to add the very best to their current and future small scale German armour projects.

Available from www.cmkkits.com

10/10 - The Editor





MIG PRODUCTIONS

1:35 BURN OUT GERMAN JERRY CANS

ITEM NO. MP 35-299

This clever set of 18 resin jerry cans make a job that's very hard to replicate very easy, and I should know as I have attempted it in the past. Trying to make jerry cans from the likes of Tamiya or Italeri look convincingly bulged, battered and distorted from extreme heat is very tricky and can more often than not end up looking nothing more than plastic kit parts that have been melted over a candle instead of sheet metal which has been distorted by extreme pressure and heat. The one thing I did notice was that on some of the cans the filler caps have been cast around the wrong way. The little rectangular tab on the cap should be nearest the handles. To be honest they are hardly noticeable and can be easily rectified by carefully slicing off the offending caps with a sharp craft knife and turned through 180 degrees and re-attaching with super glue.

Another very nice set to compliment, not only for Mig Productions' own range of burnt and knocked out vehicles and accessories but will also accompany any appropriate diorama featuring a wrecked vehicle. Available in the UK from www.historex-agents.com or direct from www.migproductions.com

8.5/10 - The Editor



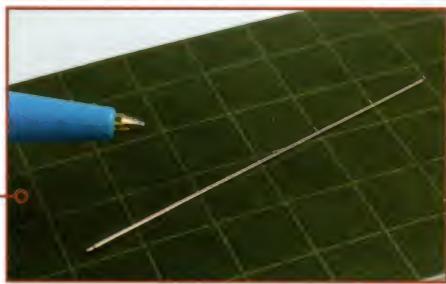
ARMORSCALE

GERMAN STANDARD 2M AFV ANTENNA ROD S35-005

Still fiddling about with stretched sprue or metal wire to make those antenna rods?

Well there is no need for that now, ArmorScale have a very nice set of three German standard 2 metre antenna rods available. These rods are very finely made out of turned brass, with the distinctive tapered finish you will have a hard time replicating when using the sprue method. This set should be in every German-building modeller's spares box!

Highly recommended.
Available from good modelshops, or direct from www.armorScale.com
10/10 - Jan Peters



MIG PRODUCTIONS

SAND AND EARTH PIGMENT SET ITEM NO. P228

I am personally a real fan of these weathering powders and have used them on practically every model I have made since their introduction. Thanks to the wide range of colours available and most importantly their ultra fine-grained pigment which adheres really well to the model or groundwork they're applied to. Mig Productions have now thoughtfully packaged six of their most popular colours into a set entitled 'Sand & Earth'.

This set comprises of Brick Dust, Europe Dust, African Earth, Beach Sand, Gulf War Sand and finally Light Dust. The great thing about these pigments is that they can be mixed together to achieve any shade desired and can be applied dry or wet. For the ultimate guide to working with and getting the most from these pigments check out our review of the F.A.Q DVD from Night Vision Creations by Mig Jimenez which offers a superb guide to working with pigments. A great set of pigments containing the most popular colours for weathering vehicles operating in desert and summer conditions. 100% recommended.

Available in the UK from www.historex-agents.com or direct from www.migproductions.com
10/10 - The Editor



SCALE LASER SERVICE

1:35 LASER CUT WOODEN PRODUCTS

SMALL FENCE ITEM NO. 35001

ROAD SIGNS RUSSIA NO.2 ITEM NO. 35003

10.5 CM CARTRIDGE CRATE ITEM NO. 35005

7.5 CM AMMO CRATE FOR PANTHER TANKS ITEM NO. 35012

7.5 CM AMMO CRATE FOR KWK 40 AND STUG 40

AMMO CRATE FOR 3.7CM FLAK ITEM NO. 35023

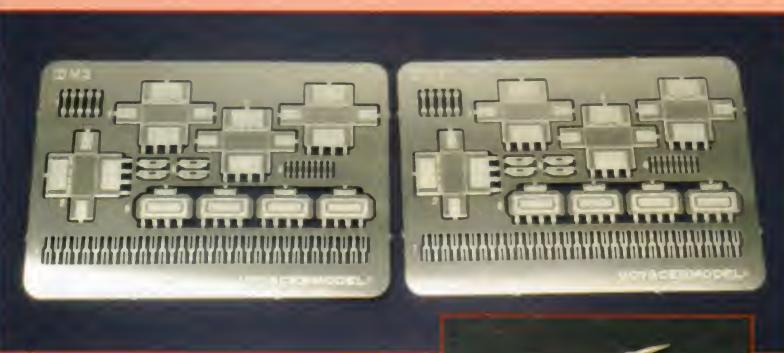
Historex Agents have just sent us a selection of these amazing laser cut signs, fences and ammo boxes from SLS. Although I have seen various laser cut products before, these really are a cut above the rest as they include all the appropriate markings, stencilling and details.

The wood they have chosen has a very fine grain which looks great in 1:35, I also like the fact that the wood has been partially pre-weathered to help reduce the brightness of the wood for a more realistic scale appearance. Also included with each pack is a small easy to follow set of instructions to aid assembly. Thoroughly recommended for those wanting the ultimate in detail.

For further information and the whole range of SLS products please check out Historex's website

Available from www.historex-agents.com
10/10 - The Editor





VOYAGER MODEL

1:35 DETAIL SETS

M2HB MACHINE GUN AMMO BOX SET

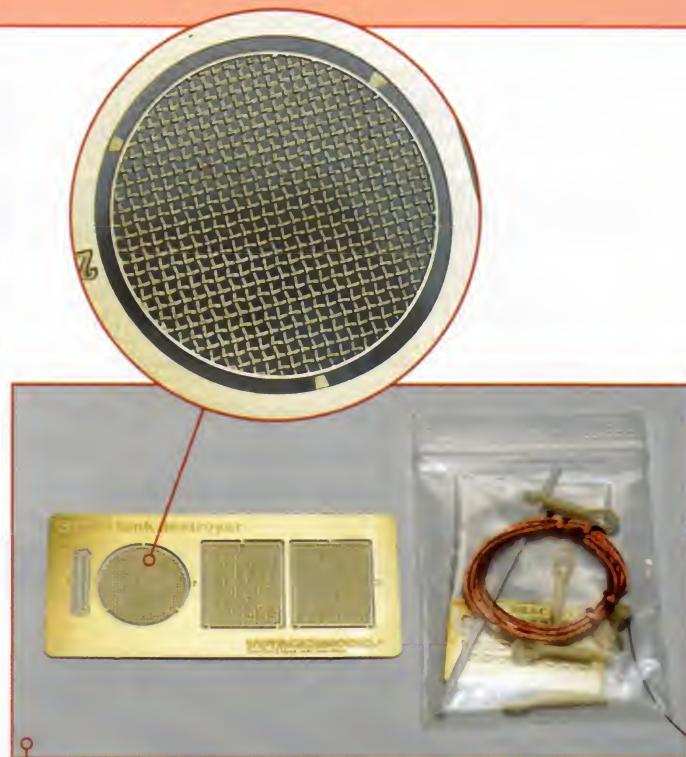
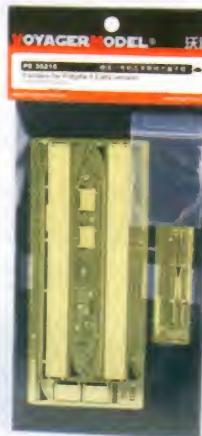
ITEM NO. VBS0301

FENDERS FOR PZKPFW.II EARLY VERSION

ITEM NO. PE 35215

Along with Jan's review of the E10 set we also have in from Voyager a set of WWII US .50 cal ammo boxes and a set of replacement fenders for Dragon's Smart Kit Panzer II. The US ammo box set consists of two small frets containing eight boxes, lids and handles along with 68 links for the 10 beautifully detailed turned brass 'fifty-cal' rounds also included. I couldn't help but notice these do bare an uncanny resemblance to the Mission Models .50 cal ammunition belt sets and I'm sure will be just as much fun to assemble into an ammo belt! Definitely a set for those craving the ultimate in detail. Our next set offers a full set of replacement etched brass fenders for Dragon's excellent panzer II, early version, again as with the ammo boxes this really is a set for the more experienced modeller who wants the very best in detail no matter how time consuming it is to assemble. Available from www.voyagermode.com

8.5/10 - The Editor



VOYAGER MODEL

35161 PHOTO ETCHED SET FOR 1/35 WWII E-25 TANK DESTROYER (FOR TRUMPETER KIT NO.00383)

If you, like me, have a Trumpeter E-25 sitting on your shelf, you might want to add some extra detail to it. Now you could either do it yourself, and scratchbuild various extras, or you could do yourself a big favour, and buy the excellent update set from Voyager Model. This set comes in a nice small sturdy box, packed full of exquisite resin parts and photo etched frets. There is a beautiful cast IR set in resin, a resin jack (to be detailed with some PE parts) a brass tube for the cleaning rod container and a piece of braided copper wire with resin end loops to make the tow cables. The PE frets hold the Schürzen armour plates (missing from the kit) and loads of smaller parts, including all sorts of clamps and fittings to make the best of the Trumpeter kit. I especially liked the look of the mesh that goes on the air intakes, this is a big improvement over the photo etch provided by Trumpeter! Highly recommended!

Available from www.voyagermode.com

10/10 - Jan Peters



K59

1:35 M2/M3 SUSPENSION UPGRADE SET K50-C008

Another set for the Dragon half-track, this time focusing on the rear suspension. This resin set replaces only the outer sections of the drive and idler wheel, along with the springs and the suspension attachment units. The set is flawlessly cast and contains some delicate pieces that will replace the parts of the kit, that due to the limits of plastic moulding are not quite as fine as they should be. The springs are of note, in that they actually have a spring to them and only the thought of breaking them stopped me from playing with them too much. The parts in this set are definitely more refined than the Dragon parts, they have even included the missing exhaust support bracket. This set is really more of a luxury than a necessity for the Dragon kit. Recommended.

Available from www.luckymodel.com

9/10 - Graeme Carruthers



Next Issue

On sale June 5th 2008

RETURN OF THE RATS

Matt Edwards revisits the 1991 Gulf War by creating this simple scene for Tamiya's Challenger 1



THE KING OF NORMANDY

Kev Smith gets stuck into Dragon's latest King Tiger with the much debated moulded-on zimmerit



FOR YOUR SAFETY



Don't forget, when using solvents such as glues, paints, thinners and cleaning agents, always ventilate your work area thoroughly and wear a face mask.

When using power tools, side cutters or any tool that can suddenly break or create high-speed airborne particles, wear approved eye protectors with hard, clear lenses. Please always model in safety!

A WAVE OF RED STEEL

Chema Cabrera raids the spares box to bring us this stunning T34 STZ (Spring 1942)

...and much more!

Due to many influencing factors, we cannot guarantee the appearance of the above projects, but we'll try our best!

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The Last Post... Techniques

MAKING SIMPLE GROUNDWORK PART 5

This month we can now start adding some of the features, to start with we will be adding a dead tree covered in ivy.



A suitable tree root was sourced from a local hedgerow! A couple of extra branches were added using smaller roots. Appropriate diameter holes were drilled for the 'branches', which were fixed in place using PVA wood glue.



Silver Birch seed will be used to make the ivy leaves. These seeds are also perfect for scattering around groundwork to replicate autumnal fallen leaves. Before using the leaves they were dyed using one of those small tins of clothing dye available from Woolworths. Unfortunately this didn't work as well as I had hoped, so the leaves will still need painting once the glue has set fully.



A hole has been drilled into the base using a standard household cordless drill and a suitable sized drill bit.



Undiluted PVA glue was painted onto our 'tree', studying the way real ivy climbs up whatever it attaches itself to.



The seeds can now be liberally sprinkled onto the 'tree'. Once the glue has been completely covered it is worth gently tapping the seeds down with a finger to ensure they make sufficient contact with the glue to ensure they stick properly.



After allowing time for the glue to set fully, some more PVA was mixed with tap water to the consistency of milk.



This thinned glue mix was then carefully dripped onto the seeds until they had all been covered. Doing this really helps to bond the seeds to the 'tree' and keeps them in place during any further painting and handling.



Now the ivy is in place and the glue has dried fully the realistic effect these seeds create can be fully appreciated. Our next task will be to paint the leaves and add some undergrowth around the base of the tree.

GERMAN 3ton 4x2
**CARGO
TRUCK**



Eastern Front markings

Keep On Truckin'

1/35 German 3ton 4x2 Cargo Truck

Item 35291

The German 3ton 4x2 Cargo Truck was the backbone of the German army's logistical support units in WWII. Featuring superb load-carrying capabilities and robust construction, this dependable two-wheel drive truck was a representative vehicle of the German army and over 70,000 were produced. Modelers around the world have been anxiously awaiting the release of this soft-skin vehicle and Tamiya does not disappoint, making it the latest addition to our renowned 1/35 Scale Military Miniature Series. The accurately

reproduced form of the rounded hood and passenger cabin, as well as exquisitely detailed ladder frame chassis and suspension components capture the rugged appearance of this workhorse. Working steering system enables front wheels to be posed in realistic positions and a full set of window masking stickers is included for ease of painting as well. Since this truck served on every battle front in WWII, modelers will have countless options when incorporating this model in dioramas with other 1/35 scale vehicles and figure sets.

Cargo deck floor and panels
feature realistic wooden texture



Length: 174mm

Driver and navigator
figures included



Model comes with fuel drums and jerry cans.
Other cargo loads can be depicted by using
separately available accessory sets.

North African Front markings

4 types of markings depicting vehicles on the Western Front, Eastern Front, and North African Front are included.



Expand Your Horizons

Check out these exciting 1/48 MM releases!

U.S. M20 ARMORED UTILITY CAR Item 32556
CRUSADER Mk.III BRITISH CRUISER TANK Mk.VI Item 32555
GERMAN 20mm FLAKVIERLING 38 Item 32554



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